

JVC

SERVICE MANUAL

COLOUR TELEVISION

AV-29L6SU

BASIC CHASSIS

MR

T-V LINK

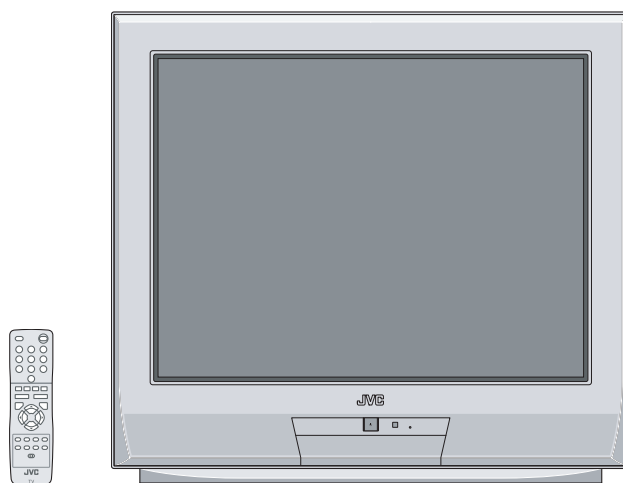


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SPECIFICATION

Items		Contents
Dimensions (W × H × D)		67.0 cm × 61.6 cm × 40.4 cm
Mass		40.5 kg
TV RF System		CCIR (B/G, I, D/K, L)
Colour System		PAL, SECAM, NTSC3.58 / NTSC4.43 (Only EXT mode)
Stereo System		A2 (B/G, D/K) / NICAM (B/G, I, D/K, L)
Receiving Frequency	VHF	47 MHz - 470 MHz
	UHF	470 MHz - 862 MHz
	French CATV	116 MHz - 172 MHz 220 MHz - 469 MHz
Intermediate Frequency	VIF	38.9 MHz (B/G, I, D/K, L)
	SIF	33.4 MHz (5.5 MHz :B/G) 32.9 MHz (6.0 MHz:I) 32.4 MHz (6.5 MHz :L, D/K)
Colour Sub Carrier Frequency	PAL	4.43 MHz
	SECAM	4.40625 MHz / 4.25 MHz
	NTSC	3.58 MHz / 4.43 MHz
Teletext System		TOP (German system) FLOF (Fastext) WST (Standard system)
Power Input		AC220 V - AC240 V, 50 Hz
Power Consumption		132 W, Standby : 2.8 W
Picture Tube		Visible size : 67.6 cm [measured diagonally] (H : 55.0 cm × V : 41.5 cm)
High Voltage		31.0 kV (+1 kV / -1.5 kV) (at zero beam current)
Speaker		13 cm × 6.5 cm oval type × 2
Audio Power Output		10 W + 10 W
Aerial Input Terminal		75 Ω unbalanced, coaxial
EXT-1 / EXT-2 (Input / Output)		21-pin Euro connector (SCART socket × 2)
EXT-3 (Input)	Video Audio (L/R)	1 V(p-p) 75 Ω, RCA pin jack × 1 500 mV(rms) (-4 dBs), High impedance, RCA pin jack × 2
Headphone Jack		3.5 mm stereo mini jack × 1
Remote Control Unit		RM-C1502 (AA/R6 dry cell battery × 2)

Design & specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 SAFETY PRECAUTIONS

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (\perp) side GND, the ISOLATED (NEUTRAL) : (\equiv) side GND and EARTH : (\oplus) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.
- (5) If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See B1 POWER SUPPLY check).
- (6) The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- (7) Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10k Ω 2W resistor to the anode button.

- (8) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

- (9) **Isolation Check (Safety for Electrical Shock Hazard)**
After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) Dielectric Strength Test

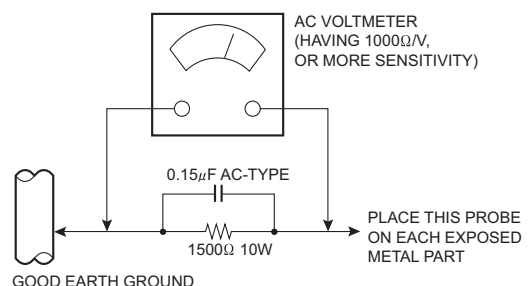
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.) This method of test requires a test equipment not generally found in the service trade.

b) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 Ω per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.). However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

ZOOM

This function can change the screen size according to the picture aspect ratio.

PICTURE MODE

This function can adjust the picture settings automatically.

3D CINEMA SOUND

You can enjoy sounds with a wider ambience.

DIGITAL VNR

This function cuts down the amount of noise in the original picture.

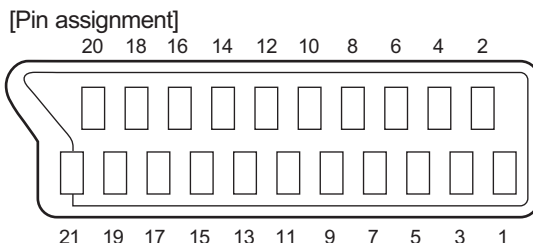
DigiPure

This function uses the latest in digital technology to give you a natural-looking picture.

2.2 21-PIN EURO CONNECTOR (SCART) : EXT-1 / EXT-2

Pin No.	Signal designation	Matching value	EXT-1	EXT-2
1	AUDIO R output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)
2	AUDIO R input	500mV(rms) (Nominal), High impedance	Used (R1)	Used (R2)
3	AUDIO L output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)	Used (LINE OUT)
4	AUDIO GND		Used	Used
5	GND (B)		Used	Used
6	AUDIO L input	500mV(rms) (Nominal), High impedance	Used (L1)	Used (L2)
7	B input	700mV _(B-W) , 75Ω	Used	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used	Used
9	GND (G)		Used	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)
11	G input	700mV _(B-W) , 75Ω	Used	Used
12	SDA		Not used	Used (SDA2)
13	GND (R)		Used	Used
14	GND (YS)		Used	Not used
15	R / C input	R : 700mV _(B-W) , 75Ω C : 300mV _(P-P) , 75Ω	Used (R)	Used (C2/R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used	Used
17	GND (VIDEO output)		Used	Used
18	GND (VIDEO input)		Used	Used
19	VIDEO output	1V _(P-P) (Negative sync), 75Ω	Used (TV OUT)	Used (LINE OUT)
20	VIDEO / Y input	1V _(P-P) (Negative sync), 75Ω	Used	Used
21	COMMON GND		Used	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)



2.3 TECHNICAL INFORMATION

2.3.1 MAIN MI-COM (CPU) PIN FUNCTION

Pin No.	Pin name	I/O	Function
1	T-V LINK_OUT	O	Data output for T-V LINK
2	MP_SW	O	External memory pack control [ON = L]
3	SUB MUTE	O	Not used
4	TCK	I	Clock for JTAG interface
5	TDO	O	Data output for JTAG interface
6	TDI	I	Data input for JTAG interface
7	TMS	I	Control signal for JTAG interface
8	RESETQ	I	CPU reset [Reset = L]
9	E3_R	I	Audio input for EXT-3
10	E3_L	I	Audio input for EXT-3
11	D_R	I	Not used
12	D_L	I	Not used
13	E1_R	I	Audio input for EXT-1
14	E1_L	I	Audio input for EXT-1
15	E2_R	I	Audio input for EXT-2
16	E2_L	I	Audio input for EXT-2
17	VREFAU	I	Reference voltage setting
18	VSUP8.0AU	I	8V power supply
19	GNDA	-	GND
20	SGND	-	GND
21	D_R_OUT	O	Audio output for EXT-2
22	D_L_OUT	O	Audio output for EXT-2
23	R_OUT	O	Audio output for EXT-1
24	L_OUT	O	Audio output for EXT-1
25	HEADPHONE_R	O	Not used
26	HEADPHONE_L	O	Not used
27	SPEAKER_R	O	Audio output for speaker/headphone
28	SPEAKER_L	O	Audio output for speaker/headphone
29	SUBWOOFER	O	Not used
30	VREFSIF	I	Reference voltage setting
31	SIF_IN+	I	SIF for VHF/UHF tuner
32	SIF_IN-	I	SIF for VHF/UHF tuner
33	VSUP5.0	I	5V power supply
34	GNDA	-	GND
35	GND3.3DIG	-	GND
36	VSUP3.3DIG	I	3.3V power supply
37	SPDIF_OUT	O	Not used
38	I2S_DA_IN	I	Not used
39	I2S_CL	-	Not used
40	I2S_WS	-	Not used
41	I2S_DEL_OUT	O	Not used
42	I2S_DEL_IN	I	Not used
43	I2S_DEL_CL	-	Not used
44	I2S_DEL_WS	-	Not used
45	VSUP3.3RAM	I	3.3V power supply
46	GND3.3RAM	-	GND
47	DVS	-	Not used
48	DEN	-	Not used
49	DCLK	-	Not used
50	DRI7	I	Not used
51	DRI6	I	Not used

Pin No.	Pin name	I/O	Function
52	DRI5	I	Not used
53	DRI4	I	Not used
54	DRI3	I	Not used
55	DRI2	I	Not used
56	DRI1	I	Not used
57	DRI0	I	Not used
58	DGI7	I	Not used
59	DGI6	I	Not used
60	DGI5	I	Not used
61	DGI4	I	Not used
62	DGI3	I	Not used
63	DGI2	I	Not used
64	DGI1	I	Not used
65	DGI0	I	Not used
66	DBI7	I	Not used
67	DBI6	I	Not used
68	DBI5	I	Not used
69	DBI4	I	Not used
70	DBI3	I	Not used
71	DBI2	I	Not used
72	DBI1	I	Not used
73	DBI0	I	Not used
74	GND3.3DRI	-	GND
75	VSUP3.3DRI	I	3.3V power supply
76	GND3.3COM	-	GND
77	VSUP3.3COM	I	3.3V power supply
78	X'TALIN	I	20.25MHz oscillation for CPU system clock
79	X'TALOUT	O	20.25MHz oscillation for CPU system clock
80	CLKOUT	O	Not used
81	VSO	O	Not used
82	HSO	O	Not used
83	SCL1	O	Clock for I2C bus (for various devices)
84	SDA1	I/O	Data for I2C bus (for various devices)
85	GND3.3FL	-	GND
86	VSUP3.3FL	I	3.3V power supply
87	AFC1	I	AFT voltage for VHF/UHF tuner
88	IDTV_POWER	O	Not used
89	SCL0	O	Clock for I2C bus (for E2PROM)
90	SDA0	I/O	Data for I2C bus (for E2PROM)
91	AUDIO MUTE	O	Audio output muting [Muting = H]
92	SLEEP_ON/OFF	O	Power off by sleep timer [OFF = H]
93	OSDV	I	V sync for OSD
94	OSDH	I	H sync for OSD
95	GND3.3IO1	-	GND
96	VSUP3.3IO1	I	3.3V power supply
97	OSDCLK	I	Not used
98	OSDSW	I	Not used
99	POWER_G	I	Not used
100	PROTECTOR	I	Abnormality detection [Emergent = L]
101	POWER_ON/OFF	O	Main power on/off control [ON = L]
102	ROTATION	O	Screen tilt adjustment

Pin No.	Pin name	I/O	Function
103	OSDB1	O	Not used
104	OSDB0	O	Not used
105	ATT SW	O	Not used
106	REMOCON	I	Remote control sensor input [No input = H]
107	OSDG1	O	Not used
108	OSDG0	O	Not used
109	POW_LED	O	POWER ON indication [ON = L]
110	LED_G	O	Not used
111	OSDR1	O	Not used
112	OSDR0	O	Not used
113	GND3.3IO1	-	GND
114	VSUP3.3IO1	I	3.3V power supply
115	TXD	O	Not used
116	RXD	I	Not used
117	IRQ	O	Not used
118	IDTV_RST	O	Not used
119	HS_OUT	O	H drive
120	VS_OUT	O	V drive
121	PCLK2	O	Not used
122	PCLK1	O	Not used
123	GND1.8DIG	-	GND
124	VSUP1.8DIG	I	1.8V power supply
125	DBO1_0	O	Not used
126	DBO1_1	O	Not used
127	DBO1_2	O	Not used
128	DBO1_3	O	Not used
129	DBO1_4	O	Not used
130	DBO1_5	O	Not used
131	DBO1_6	O	Not used
132	DBO1_7	O	Not used
133	VSUP3.3IO2	I	3.3V power supply
134	GND3.3IO2	-	GND
135	DBO1_8	O	Not used
136	DBO1_9	O	Not used
137	DGO1_0	O	Not used
138	DGO1_1	O	Not used
139	DGO1_2	O	Not used
140	DGO1_3	O	Not used
141	DGO1_4	O	Not used
142	DGO1_5	O	Not used
143	DGO1_6	O	Not used
144	DGO1_7	O	Not used
145	DGO1_8	O	Not used
146	DGO1_9	O	Not used
147	DRO1_0	O	Not used
148	DRO1_1	O	Not used
149	GND3.3IO2	-	GND
150	VSUP3.3IO2	I	3.3V power supply
151	DRO1_2	O	Not used
152	DRO1_3	O	Not used
153	DRO1_4	O	Not used
154	DRO1_5	O	Not used
155	DRO1_6	O	Not used

Pin No.	Pin name	I/O	Function
156	DRO1_7	O	Not used
157	DRO1_8	O	Not used
158	DRO1_9	O	Not used
159	AGC	I	RF AGC voltage for VHF/UHF tuner
160	KEY1	I	Key scan for front control (CH+/CH-/MENU)
161	E1_SLOW	I	EXT-1 SLOW detection
162	E2_SLOW	I	EXT-2 SLOW detection
163	GND3.3DAC	-	GND
164	VSUP3.3DAC	I	3.3V power supply
165	ROUT	O	R output for CRT
166	GOUT	O	G output for CRT
167	BOUT	O	B output for CRT
168	SVMOUT	O	Y signal for velocity scan modulation
169	VSUP1.8FE	I	1.8V power supply
170	VSUP3.3FE	I	3.3V power supply
171	SC_YS1	I	Ys input for EXT-1
172	SC_B1	I	B input for EXT-1
173	SC_G1	I	G input for EXT-1
174	SC_R1	I	R input for EXT-1
175	SC_YS2	I	Ys input for EXT-2
176	SC_B2	I	B input for EXT-2
177	SC_G2	I	G input for EXT-2
178	SC_R2/C	I	R input for EXT-2
179	VIN13	I	Not used
180	VIN12	I	Not used
181	D_CV	I	Not used
182	E3_CV	I	Video input for EXT-3
183	VIN8	I	Not used
184	E1_CV	I	Video input for EXT-1
185	VSUP1.8FE	I	1.8V power supply
186	GND4	-	GND
187	SC_R2/C	I	C input for EXT-2
188	E2_CV/Y	I	Video/Y input for EXT-2
189	VIN3	I	Not used
190	VIN2	I	Not used
191	TV_CV	I	Video input for VHF/UHF tuner
192	VSUP3.3VO	I	3.3V power supply
193	VOUT3	O	Not used
194	VOUT2	O	Not used
195	V2_OUT	O	Video output for EXT-2
196	GND3.3IO3	-	GND
197	VSUP3.3IO3	I	3.3V power supply
198	656I0	I	Not used
199	656I1	I	Not used
200	656I2	I	Not used
201	656I3	I	Not used
202	656I4	I	Not used
203	656I5	I	Not used
204	656I6	I	Not used
205	656I7	I	Not used
206	656CLKI	I	Not used
207	656CLKO	O	Not used
208	TV_LINK_IN	I	Data input from T-V LINK

SECTION 3 DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

3.1.1 REMOVING THE REAR COVER

- (1) Unplug the power cord.
- (2) Remove the 9 screws [A] and 5 screws [B].
- (3) Withdraw the REAR COVER toward you.

3.1.2 REMOVING THE AV TERMINAL BOARD

- Remove the REAR COVER
 - (1) Remove the 2 screws [C].
 - (2) Remove the ANTENNA TERMINAL.
 - (3) Withdraw the AV TERMINAL BOARD toward you.

3.1.3 REMOVING THE CHASSIS

- Remove the REAR COVER
 - (1) Slightly raise the both sides of the CHASSIS by hand and remove the 2 claws under the both sides of the CHASSIS from the front cabinet.
 - (2) Withdraw the CHASSIS backward.(If necessary, take off the wire clamp, connectors etc.)

3.1.4 REMOVING THE POWER SW PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 2 screws [D].
 - (2) Remove the CONTROL BASE with the POWER SW PWB and FRONT CONTROL PWB.
 - (3) Remove the POWER SW PWB from the CONTROL BASE.

3.1.5 REMOVING THE FRONT CONTROL PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 2 screws [D].
 - (2) Remove the CONTROL BASE with the POWER SW PWB and FRONT CONTROL PWB.
 - (3) Remove the 2 screws [E].
 - (4) Remove the FRONT CONTROL PWB from the CONTROL BASE.

3.1.6 REMOVING THE MAIN PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 4 screws [F].
 - (2) Remove the MAIN PWB.

3.1.7 REMOVING THE AC PWB

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 2 claws.
 - (2) Remove the AC PWB.

3.1.8 REMOVING THE SPEAKER

- Remove the REAR COVER.
- Remove the CHASSIS.
 - (1) Remove the 4 screws [G].
 - (2) Remove the SPEAKER.
 - (3) Remove the opposite SPEAKER by the same method.

3.1.9 CHECKING THE PW BOARD

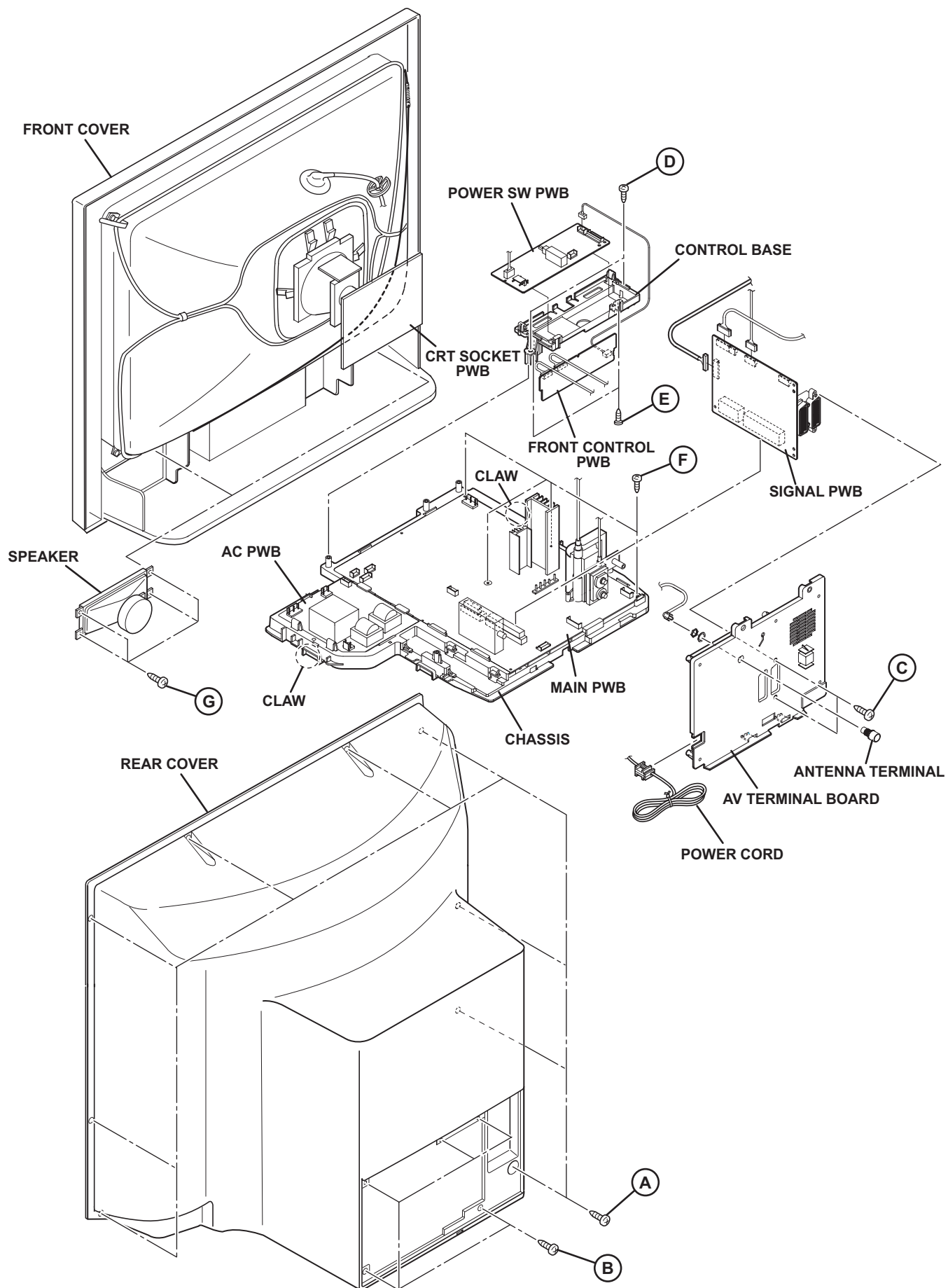
- To check the backside of the PW Board.
 - (1) Pull out the CHASSIS. (Refer to REMOVING THE CHASSIS).
 - (2) Remove the CONTROL BASE.
 - (3) Front side is turned down and a chassis is stood perpendicularly.
The check by the side of the solder side of the MAIN PWB and AC PWB is possible.

CAUTION:

- When erecting the CHASSIS, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the wire connector is properly connected.
- When conducting a check with power supplied, be sure to confirm that the CRT EARTH WIRE (BRAIDED ASS'Y) is connected to the CRT SOCKET PW board.

3.1.10 WIRE CLAMPING AND CABLE TYING

- (1) Be sure to clamp the wire.
- (2) Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.



3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 MEMORY IC REPLACEMENT PROCEDURE

1. Power off

Switch off the power and disconnect the power plug from the AC outlet.

2. Replace the memory IC

Be sure to use the memory IC written with the initial setting values.

3. Power on

Connect the power plug to the AC outlet and switch on the power.

4. System constant check and setting

* It must not adjust without signal.

- (1) Press the **[INFORMATION]** key and the **[MUTING]** key of the REMOTE CONTROL UNIT simultaneously.
- (2) The SERVICE MENU screen will be displayed (Fig. 1).
- (3) While the SERVICE MENU is displayed, press the **[INFORMATION]** key and **[MUTING]** key simultaneously, and the SYSTEM CONSTANT SET screen will be displayed (Fig. 2).
- (4) Check the setting values of the SYSTEM CONSTANT SET. If the value is different, select the setting item with the **[FUNCTION ▲ / ▼]** key, and set the correct value with the **[FUNCTION ◀ / ▶]** key.
- (5) Press the **[OK]** key to memorize the setting value.
- (6) Press the **[INFORMATION]** key twice, and return to the normal screen.

5. Receiving channel setting

Refer to the OPERATING INSTRUCTIONS and set the receive channels (Channels Preset) as described.

6. User settings

Check the user setting items according to the given in page later. Where these do not agree, refer to the OPERATING INSTRUCTIONS and set the items as described.

7. SERVICE MODE setting

Verify what to set in the SERVICE MODE, and set whatever is necessary (Fig.1). Refer to the SERVICE ADJUSTMENT for setting.

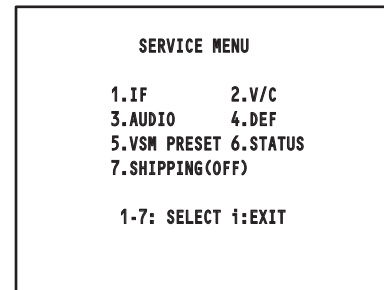


Fig.1

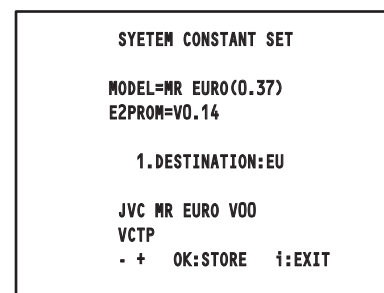
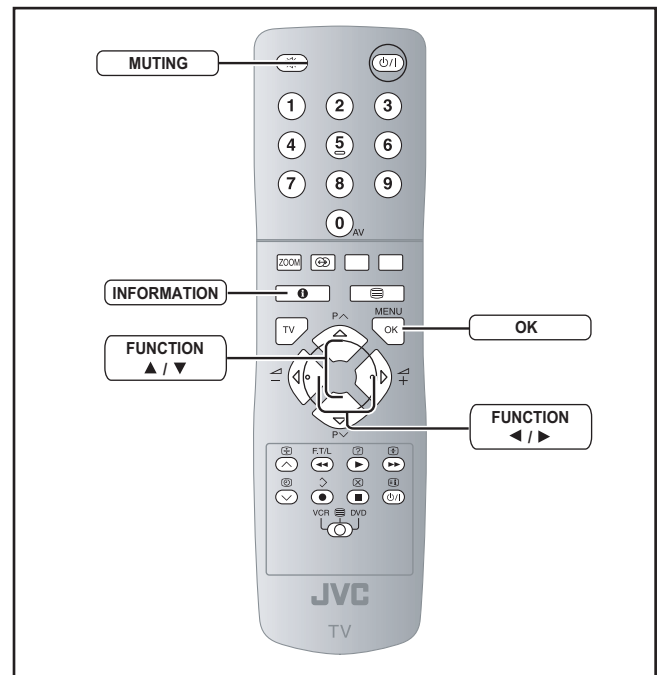


Fig.2



3.2.2 SYSTEM CONSTANT SETTING

Setting item	Setting content	Setting value
1.DESTINATION	EU / EK / EI	EU
2.PICTURE TILT	YES / NO	YES

3.2.3 SETTINGS OF FACTORY SHIPMENT

3.2.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	PR1
VOLUME	10

3.2.3.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
CHANNEL	PR1
VOLUME	10
ZOOM	AUTO
3D CINEMA SOUND	OFF

3.2.3.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE SETTING

Setting item	Setting position
PICTURE MODE	BRIGHT
COLOUR TEMP.	COOL
FEATURES	
DIGITAL VNR	AUTO
DigiPure	AUTO
COLOUR CREATION	ON
COLOUR SYSTEM	TV : According to preset CH
	EXT : AUTO

(3) FEATURES

Setting item	Setting position
SLEEP TIMER	OFF
CHILD LOCK	OFF
BLUE BACK	ON

(4) SET UP

Setting item	Setting position
AUTO PROGRAM	TV channel automatically set
EDIT/MANUAL	PRESET CH only
	The others : BLANK
LANGUAGE	ENGLISH
PICTURE TILT	Middle
DECODER(EXT-2)	OFF
EXT SETTING	
ID	BLANK
S-IN	BLANK
DUBBING	TV → EXT-2

(2) SOUND SETTING

Setting item	Setting position
BASS	Centre
TREBLE	+6
BALANCE	Centre
HYPER SOUND	OFF
3D CINEMA SOUND	
SURROUND	MID
BASS BOOST	MID

(5) VSM PRESET TABLE

Item	Variable range	Setting value					
		PICTURE MODE			COLOUR TEMP.		
		BRIGHT	STANDARD	SOFT	COOL	NORMAL	WARM
1.CONTRAST	-16~+16	+16	+5	-3	---	---	---
2.BRIGHT	-16~+16	0	0	0	---	---	---
3.SHARP	-16~+16	0	0	0	---	---	---
4.COLOUR	-16~+16	0	0	0	---	---	---
5.HUE	-16~+16	0	0	0	---	---	---
1.DRIVE R	-64~+63	---	---	---	-5	0	+6
2.DRIVE G	-64~+63	---	---	---	-5	0	0
3.DRIVE B	-64~+63	---	---	---	0	0	0

3.2.4 SERVICE MODE SETING ITEMS

Setting item	Setting value	Setting item	Setting value
1. IF	---	4. DEF	1. V-SHIFT 2. V-SIZE 3. H-CENT 4. H-SIZE 5. TRAPEZ 6. EW-PIN 7. COR-UP 8. COR-LO 9. COR-UP-S 10. COR-LO-S 11. ANGLE 12. BOW 13. V-S.CR 14. V-LIN 15. UP VLIN 16. LO VLIN 17. H COMP 18. PIN COMP 19. HC PARA DC
2. V/C	1. RGB BLK 2. CUTOFF R 3. CUTOFF G 4. CUTOFF B 5. DRIVE R 6. DRIVE G 7. DRIVE B 8. BRIGHT 9. CONT. 10. COLOUR 11. HUE 12. SHARP 13. SC ADJ		
3. AUDIO [Do not adjust]	1. ERROR RATE 2. A2 IDNET 3. STD RESULT 4. SPATIAL EFFECT 5. VIRTUAL EFFECT 6. BASS EFFECT 7. AMP LIMIT 8. HARMONIC 9. LPF 10. HPF 11. HYPER EFFFECT H 12. HYPER EFFFECT L	5. VSM PRESET	BRIGHT/SOFT/STANDARD 1. CONTRAST 2. BRIGHT 3. SHARP 4. COLOUR 5. HUE COOL/WARM/NORMAL 1. DRIVE R 2. DRIVE G 3. DRIVE B
		6. STATUS [Do not adjust]	---
		7.SHIPPING (OFF) [Do not adjust]	---

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

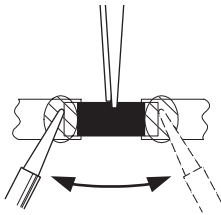
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

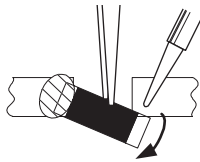
1. How to remove Chip parts

[Resistors, capacitors, etc.]

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with the tweezers and remove the chip part.

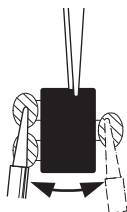


[Transistors, diodes, variable resistors, etc.]

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



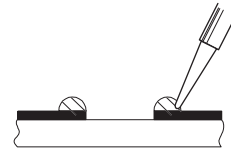
NOTE :

After removing the part, remove remaining solder from the pattern.

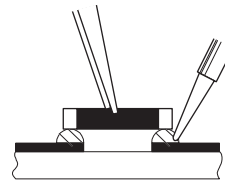
2. How to install Chip parts

[Resistors, capacitors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.

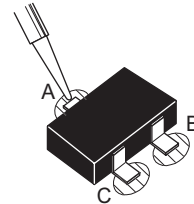


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

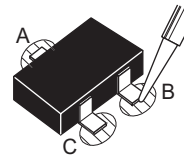


[Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead **A** as indicated in the figure.



- (4) Then solder leads **B** and **C**.



SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) There are 2 ways of adjusting this TV : One is with the **REMOTE CONTROL UNIT** and the other is the conventional method using adjustment parts and components.
- (2) The adjustment using the **REMOTE CONTROL UNIT** is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warming up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

4.2 PRESET SETTING BEFORE ADJUSTMENT

Unless otherwise specified in the adjustment items, preset the following functions with the **REMOTE CONTROL UNIT**.

Item	Preset value
PICTURE MODE	STANDARD
CONTRAST / BRIGHT / SHARP / COLOUR / HUE	Centre
COLOUR TEMP	NORMAL
DIGITAL VNR	AUTO
BASS / TREBLE / BALANCE	Centre
HYPER SOUND	OFF
ZOOM	REGULAR
SLEEP TIMER	OFF

4.3 MEASURING INSTRUMENT AND FIXTURES

- (1) DC voltmeter (or digital voltmeter)
- (2) Oscilloscope
- (3) Signal generator
(Pattern generator : PAL / SECAM / NTSC)
- (4) Remote control unit

4.4 ADJUSTMENT ITEMS

■ CHECK ITEM

- B1 VOLTAGE check
- HIGH VOLTAGE check
- IF VCO check

■ FOCUS

- FOCUS adjustment

■ DEFLECTION CIRCUIT.

- V. POSITION adjustment
- V. SIZE adjustment
- H. POSITION adjustment
- H. SIZE adjustment
- SIDE-PIN adjustment
- TRAPEZIUM adjustment
- UPPER/LOWER CORNER PIN adjustment
- PARALLELOGRAM(TILT) adjustment
- BOW adjustment
- V. S-SHAPE CORRECTION & V.LINEARITY adjustment

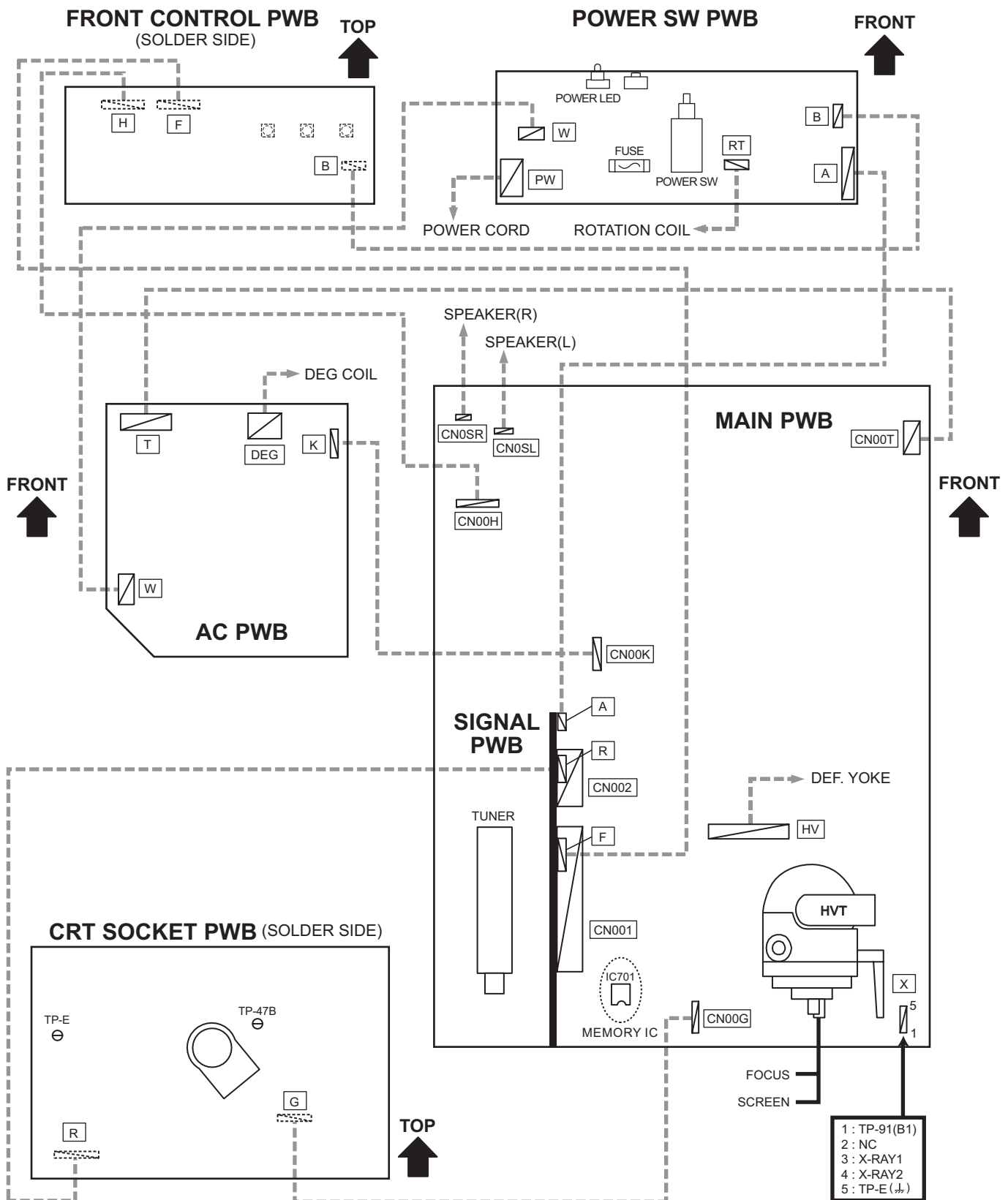
■ VIDEO CIRCUIT

- WHITE BALANCE adjustment
- SUB BRIGHT adjustment
- SUB CONTRAST adjustment
- SUB COLOUR adjustment
- SUB HUE adjustment
- COLOUR DECODER VCO adjustment

■ VSM PRESET SETTING

- VSM PRESET setting

4.5 ADJUSTMENT LOCATIONS



4.6 TOOL OF SERVICE MODE OPERATION

Operate the SERVICE MODE with the REMOTE CONTROL UNIT.

4.6.1 SERVICE MODE ITEMS

With the SERVICE MODE, various adjustment can be made, and they are broadly classified in the following items of settings.

- 1.IF** : This mode adjusts the setting values of the IF circuit.
- 2.V/C** : This mode adjusts the setting values of the VIDEO circuit.
- 3.AUDIO** : This mode adjusts the setting values of the MULTI-SOUND circuit. **[Do not adjust]**
- 4.DEF** : This mode adjusts the setting values of the DEFLECTION circuit.
- 5.VSM PRESET** : This mode adjusts the setting values of COOL, NORMAL and WARM. (VSM : Video Status Memory)
- 6.STATUS** : This mode is shows the monitor of SOFT, TELETEXT, ASPECT, PROTECT, FLASH. **[Do not adjust]**
- 7.SHIPPING (OFF)** : This mode is set at shipping. **[Do not adjust]**

4.6.2 BASIC OPERATION IN SERVICE MODE

4.6.2.1 HOW TO ENTER THE SERVICE MODE

Press the **[INFORMATION]** key and **[MUTING]** key of the REMOTE CONTROL UNIT simultaneously. Then SERVICE MODE screen will be displayed as shown figure.

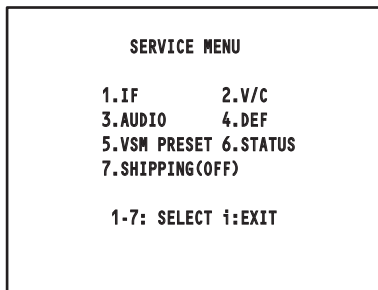


Fig.1

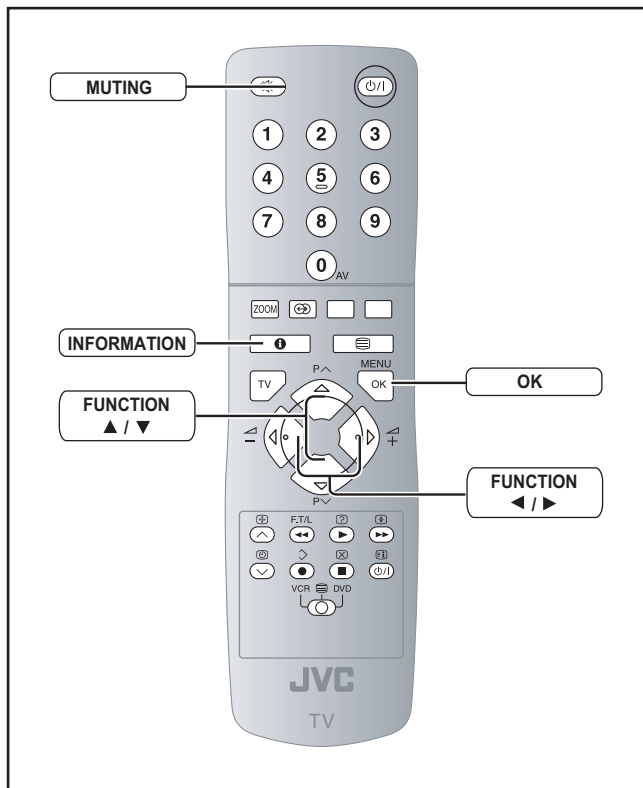


Fig.2

4.6.2.2 SELECTION OF SUB MENU SCREEN

Press one of the CHANNEL number key with the remote control unit, and select the SUB MENU SCREEN from SERVICE MODE.

4.6.2.3 SETTING METHOD

■ 1.IF

[1. VCO] : It must not adjust without signal

- (1) **[1]** key
Select 1.IF.
- (2) Check the arrow position between the ABOVE REF. and BELOW REF.
- (3) **[INFORMATION]** key
Return to the SERVICE MODE main manu screen.

■ 2.V/C, 4.DEF and 5.VSM PRESET

- (1) **[2], [4] and [5]**key
Select one from 2.V/C, 4.DEF, 5.VSM PRESET.
- (2) **[FUNCTION ▲/▼]** key
Select setting items.
- (3) **[FUNCTION ◀/▶]** key
Set the setting values of the setting items.
- (4) **[OK]** key
Memorize the setting value.
(Before storing the setting values in memory, do not press the CH, TV, POWER ON / OFF key. if you do, the values will not be stored in memory.)
- (5) **[INFORMATION]** key
Return to the SERVICE MODE main manu screen.

■ 3.AUDIO, 6.STATUS and 7.SHIPPING (OFF)

It is not requirement to adjustment.

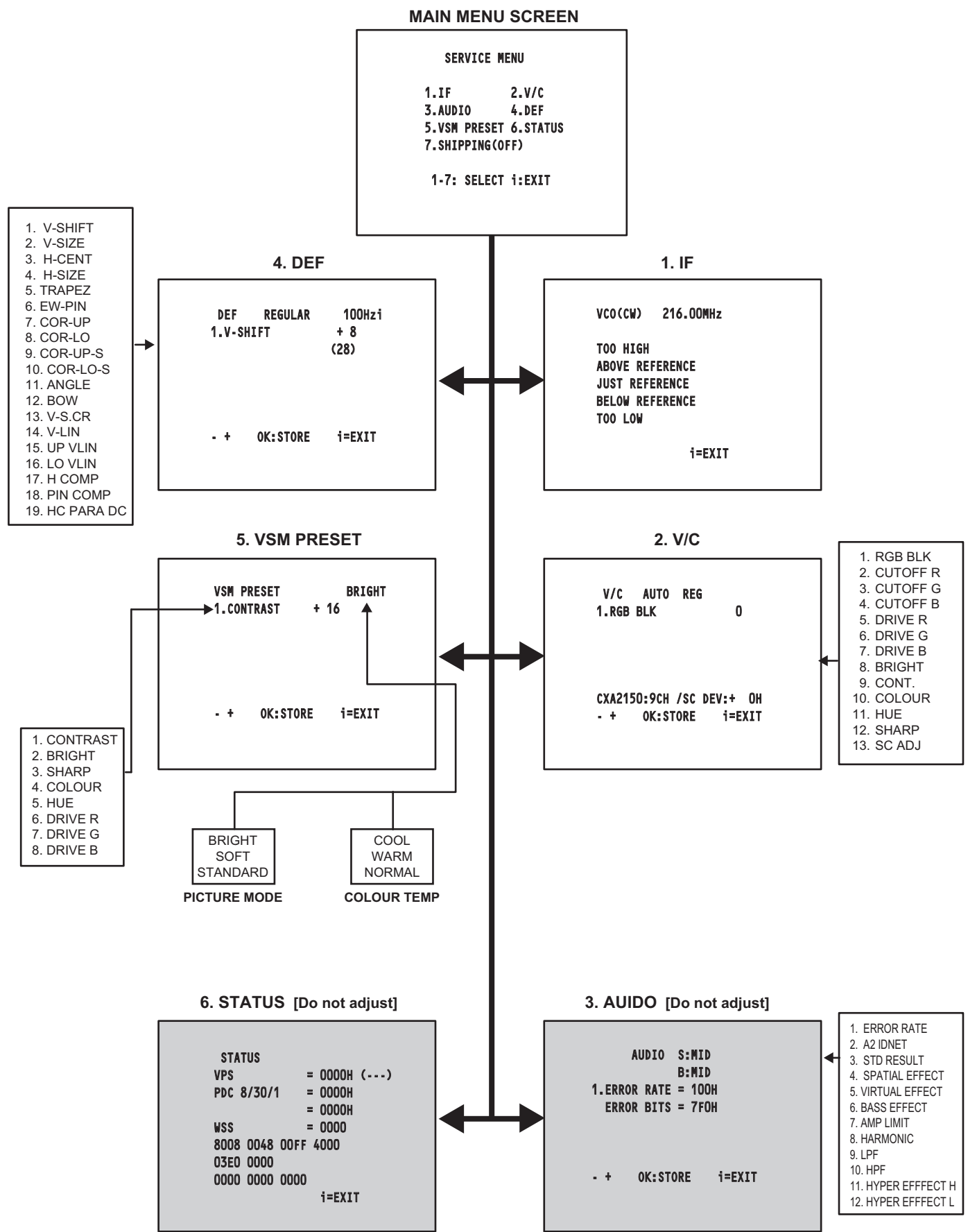
4.6.2.4 MEMORIZE THE ADJUSTMENT DATA

When adjustment is completed, press the **[OK]** key to memorize the adjustment value. If not to do it, adjustment data is not memorized to the memory IC. And if exit the adjustment mode before memorize the data, the adjustment value which you change is canceled.

4.6.2.5 RELEASE OF SERVICE MODE

After completing the setting, return to the SERVICE MODE, then again press the **[INFORMATION]** key.

4.6.3 SERVICE MODE FLOW CHART



4.7 INITIAL SETTING VALUE OF SERVICE MODE

- (1) Adjustment of the SERVICE MODE is made on the basis of the initial setting values. However, the new setting values which displays on the screen in its optimum condition may differ from the initial setting value.
- (2) Do not change the initial setting values of the items not listed in "ADJUSTMENT PROCEDURE".
- (3) "---" is impossible to adjust or not requirement to adjustment.

4.7.1 [2. V/C]

Setting item	Variable range	Initial setting value			
		PAL	SECAM	NTSC 3.58	NTSC 4.43
1.RGB BLK	---	---	---	---	---
2.CUTOFF R	0 - 63	39	39	39	39
3.CUTOFF G	0 - 63	20	20	20	20
4.CUTOFF B	0 - 63	24	24	24	24
5.DRIVE R	0 - 63	30	30	30	30
6.DRIVE G	0 - 63	30	30	30	30
7.DRIVE B	0 - 63	[30]	[30]	[30]	[30]
8.BRIGHT	0 - 63	25	25	25	25
9.CONT.	0 - 63	28	28	28	28
10.COLOUR	0 - 63	35	35	35	[0]
11.HUE	-63 - +63	---	---	0	[0]

NOTE: [] is fixed values.

Setting item	Variable range	Initial setting value							
		PAL		SECAM		NTSC 3.58		NTSC 4.43	
		TV	EXT	TV	EXT	TV	EXT	TV	EXT
12.SHARP	-3 - +3	[-3]	[+3]	[-3]	[+3]	[-3]	[+3]	[-3]	[+3]

NOTE: [] is fixed values.

Setting item	Variable range	Initial setting value			
		PAL	SECAM	NTSC 3.58	NTSC 4.43
13.SC ADJ	0 - 63	13	---	---	---

4.7.2 [3. AUDIO] [Do not adjust]

Setting item	Variable range	Fixed value
1. ERROR RATE	000H - FF0H	100H
2. A2 IDNET	00H - FFH	19H
3. STD RESULT	---	---
4. SPATIAL EFFECT	00H - FFH	4FH
5. VIRTUAL EFFECT	00H - FFH	4DH
6. BASS EFFECT	00H - FFH	29H
7. AMP LIMIT	00H - FFH	FAH
8. HARMONIC	00H - FFH	00H
9. LPF	00H - FFH	09H
10. HPF	00H - FFH	05H
11. HYPER EFFECT H	00H - FFH	7FH
12. HYPER EFFECT L	00H - FFH	00H

4.7.3 [4. DEFLECTION]

Setting item	Variable range	Initial setting value			
		REGULAR		16 : 9	
		100Hz i	120Hz i	100Hz i	120Hz i
1. V-SHIFT	-32 - +31	-4	-2	0	0
2. V-SIZE	-32 - +31	+9	-2	[0]	[0]
3. H-CENT	-32 - +31	-5	0	0	0
4. H-SIZE	-32 - +31	-10	-1	0	0
5. TRAPEZ	-32 - +31	-13	-2	+1	0
6. EW-PIN	-32 - +31	-18	0	+2	+1
7. COR-UP	-32 - +31	+1	0	0	+1
8. COR-LO	-32 - +31	-1	0	-2	+1
9. COR-UP-S	0 - +3	0	0	0	0
10. COR-LO-S	0 - +3	+1	0	0	0
11. ANGLE	-32 - +31	-5	0	0	0
12. BOW	-32 - +31	+1	+1	0	0
13. V-S.CR	0 - +15	+8	0	0	0
14. V-LIN	0 - +15	+8	0	0	0
15. UP VLIN	0 - +15	0	0	0	0
16. LO VLIN	0 - +15	0	0	0	0
17. H COMP	0 - +15	[+1]	[+1]	[+1]	[+1]
18. PIN COMP	0 - +7	[+1]	[+1]	[+1]	[+1]
19. HC PARA DC	-32 - +31	[-8]	[-8]	[-8]	[-8]

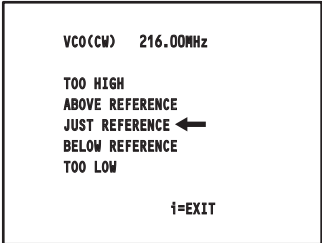
NOTE: [] is fixed values.

4.7.4 [5. VSM PRESET]

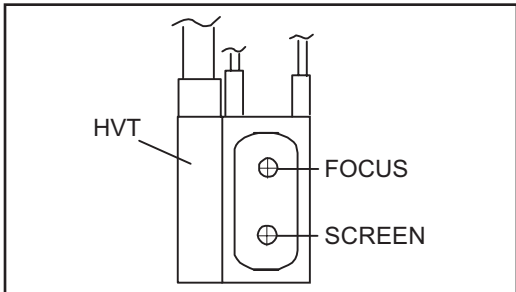
Item	Variable range	Setting value					
		PICTURE MODE			COLOUR TEMP.		
		BRIGHT	STANDARD	SOFT	COOL	NORMAL	WARM
1. CONTRAST	-16~+16	+16	+5	-3	---	---	---
2. BRIGHT	-16~+16	0	0	0	---	---	---
3. SHARP	-16~+16	0	0	0	---	---	---
4. COLOUR	-16~+16	0	0	0	---	---	---
5. HUE	-16~+16	0	0	0	---	---	---
1. DRIVE R	-64~+63	---	---	---	-5	0	+6
2. DRIVE G	-64~+63	---	---	---	-5	0	0
3. DRIVE B	-64~+63	---	---	---	0	0	0

4.8 ADJUSTMENT PROCEDURE

4.8.1 CHECK ITEM

Item	Measuring instrument	Test point	Adjustment part	Description
B1 VOLTAGE	DC voltmeter Remote control unit	X connector 1-pin:TP-91 5-pin:TP-E [MAIN PWB]	[2. V/C] 1. RGB BLK	(1) Receive any broadcast. (2) Select 2. V/C from the SERVICE MODE. (3) Select < 1.RGB BLK >. (4) Press the [MENU ◀ ▶] key to find the cut off screen (Black screen). (5) Connect a DC voltmeter to TP-91(B1) and TP-E. (6) Make sure that the voltage is DC139.0 ±2.0V.
HIGH VOLTAGE	HV voltmeter Remote control unit	CRT anode Chassis GND	[2. V/C] 1. RGB BLK	(1) Receive any broadcast. (2) Select 2. V/C from the SERVICE MODE. (3) Select < 1. RGB BLK >. (4) Press the [MENU ◀ ▶] key to find the cut off screen (Black screen). (5) Connect the earth clip of HV voltmeter to chassis GND. (6) Connect the probe of HV voltmeter to CRT anode. (7) Make sure that the voltage is DC31.0kV(+1kV, -1.5kV). NOTE: <ul style="list-style-type: none"> Remove the probe before removing the earth clip.
IF VCO	Remote control unit		[1.IF] VCO	<ul style="list-style-type: none"> Under normal conditions, no adjustment is required. Confirmation adjustment. (1) Select 1.IF from the SERVICE MODE. (2) Receive any broadcast. (3) Check the ◀(Arrow) position between the ABOVE REF. and BELOW REF.
 <p>VCO(CW) 216.00MHz</p> <p>TOO HIGH ABOVE REFERENCE JUST REFERENCE ← BELOW REFERENCE TOO LOW</p> <p>i=EXIT</p>				

4.8.2 FOCUS

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS	Signal generator		FOCUS VR [In HVT]	(1) Receive the cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) While looking at the screen, adjust the FOCUS VR so that the vertical and horizontal lines will be clear and in fine detail. (4) Make sure that the picture is in focus even when the screen gets darkened.
 <p>HVT</p> <p>FOCUS</p> <p>SCREEN</p>				

4.8.3 DEFLECTION CIRCUIT

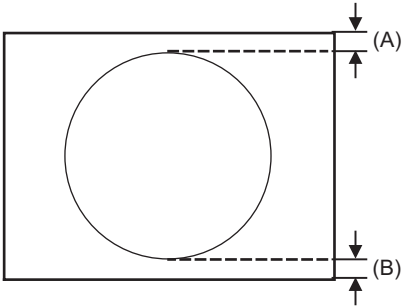
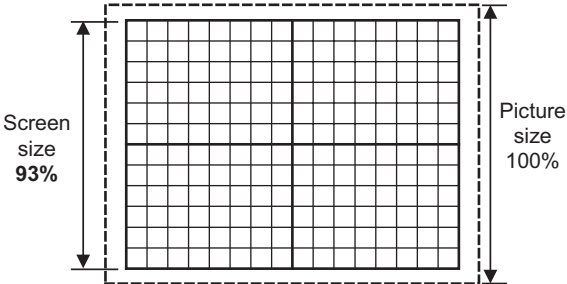
This TV has two kinds of aspect modes (1. REGULAR, 2. 16 : 9).

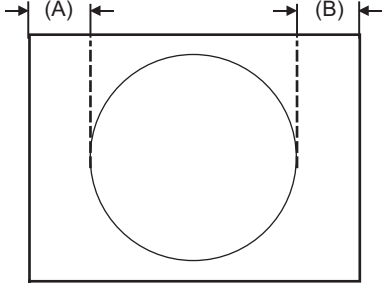
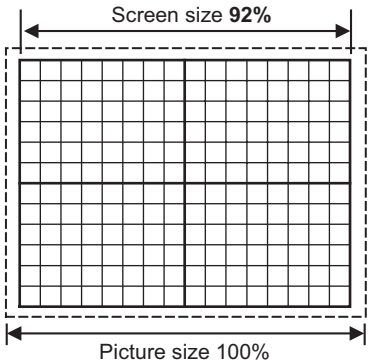
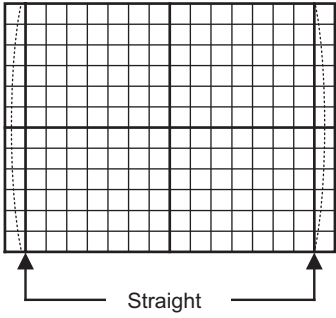
120Hz-i is a signal that is output to a screen when a 60Hz signal is input to a television set. It is an interlace-scanned picture of 120Hz.

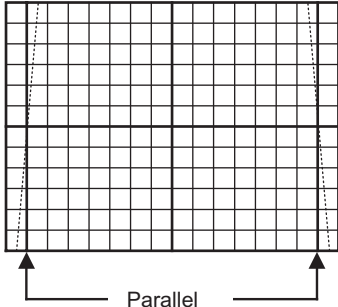
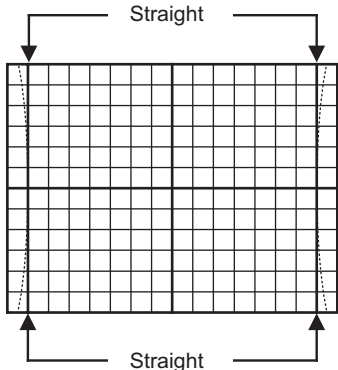
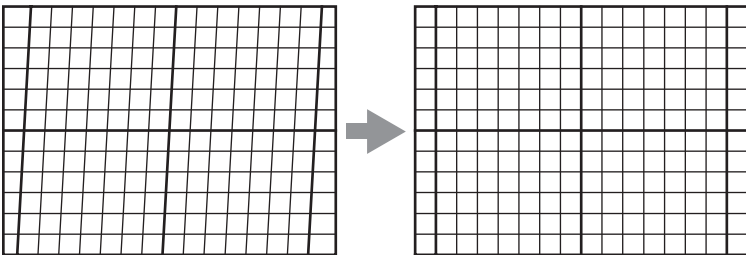
100Hz-i is a signal that is output to a screen when a 50Hz signal is input to a television set. It is an interlace-scanned picture of 100Hz.

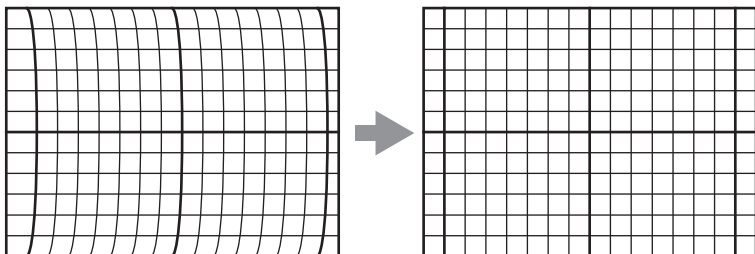
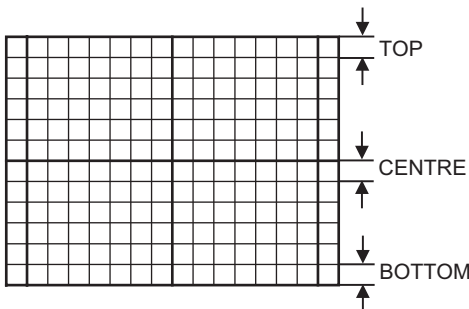
There are two kinds of adjustment modes depending upon the vertical frequency of the signal for adjustment input to the TV (100Hz/120Hz). Because there are two kinds of aspect modes for each vertical frequency, there are many adjustment modes as same as the aspect modes. However, the adjustment value of other aspect modes of 100Hz (by the offset function) is automatically corrected, if it adjusts in the REGULAR mode of 100Hz, even if it doesn't adjust in all modes. Each adjustment value of 120Hz is automatically set based on the adjustment value in each aspect mode by 100Hz. Please confirm the adjustment in each vertical frequency and each aspect mode after completing the adjustment in the REGULAR mode of 100Hz. And if it is not best respectively, adjust it.

- The adjustment using the remote control unit is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Item	Measuring instrument	Test point	Adjustment part	Description
V. POSITION	Signal generator Remote control unit		[4. DEF] 1. V-SHIFT	(1) Receive a circle pattern signal of vertical frequency 50Hz (PAL). (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 1.V-SHIFT >. (5) Adjust to become A = B . (6) Check the adjustment value above in other zoom mode changed by the [Red] key. If it is a wrong adjustment, re-adjust in REGULAR mode and adjust by < 1. V-SHIFT >. (7) Press the [OK] key to memorize the set values.
				
V. SIZE	Signal generator Remote control unit		[4. DEF] 2.V-SIZE	(1) Receive the PAL cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 2.V-SIZE >. (5) Set the initial setting value of < 2.V-SIZE >. (6) Adjust to make sure that the vertical screen size of the picture size is 93% . (7) Press the [OK] key to memorize the set values. (8) Input the NTSC cross hatch signal from the EXT terminal. (9) Follow the same step 2 to 7 as in PAL signal, re-adjust by < 2.V-SIZE > if it is a wrong adjustment.
				

Item	Measuring instrument	Test point	Adjustment part	Description
H. POSITION	Signal generator Remote control unit		[4. DEF] 3.H-CENT	(1) Receive the PAL circle pattern signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 3.H-CENT > . (5) Set the initial setting value of < 3.H-CENT > . (6) Adjust to become A=B. (7) Press the [OK] key to memorize the set values.
				
H. SIZE	Signal generator Remote control unit		[4. DEF] 4.H-SIZE	(1) Receive the PAL cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 4.H-SIZE > . (5) Set the initial setting value of < 4.H-SIZE > . (6) Adjust to make sure that the horizontal screen size of the picture size is 92% . (7) Press the [OK] key to memorize the set value. (8) Check the adjustment value above in other ZOOM mode. If it is a wrong adjustment, re-adjust by < 4.H-SIZE > . (9) Press the [OK] key to memorize the set values.
				
SIDE-PIN	Signal generator Remote control unit		[4. DEF] 6.EW-PIN	(1) Receive the PAL cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 6.EW-PIN > . (5) Set the initial setting value of < 6.EW-PIN > . (6) Adjust to make the vertical lines at the right and left edges of the screen straight. (7) Press the [OK] key to memorize the set values.
				

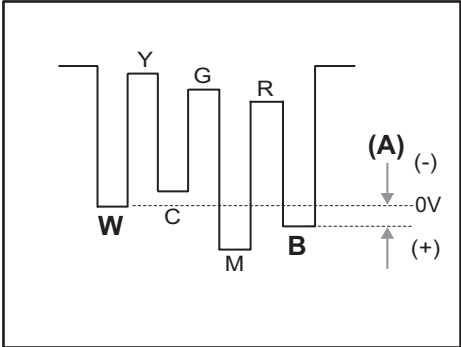
Item	Measuring instrument	Test point	Adjustment part	Description
TRAPEZIUM	Signal generator		[4. DEF] 5.TRAPEZ	<div>(1) Receive the PAL cross hatch signal.</div> <div>(2) Set the ZOOM mode to REGULAR.</div> <div>(3) Select 4. DEF from the SERVICE MODE.</div> <div>(4) Select < 5.TRAPEZ >.</div> <div>(5) Set the initial setting value of < 5.TRAPEZ >.</div> <div>(6) Adjust to bring the vertical lines at the right and left edges of the screen in parallel.</div> <div>(7) Press the [OK] key to memorize the set values.</div>
	Remote control unit			
<div></div>				
UPPER/LOWER CORNER PIN	Signal generator		[4. DEF] 7.COR-UP 8.COR-LO 9.COR-UP-S 10.COR-LO-S	<div>(1) Receive the PAL cross hatch signal.</div> <div>(2) Set the ZOOM mode to REGULAR.</div> <div>(3) Select 4. DEF from the SERVICE MODE.</div> <div>(4) Select < 8. COR-LO >.</div> <div>(5) Set the initial setting value of < 8. COR-LO >.</div> <div>(6) Adjust to bring the straight line at the lower corner.</div> <div>(7) Select < 7. COR-UP >.</div> <div>(8) Set the initial setting value of < 7. COR-UP >.</div> <div>(9) Adjust to bring the straight line at the upper corner.</div> <div>(10) Adjust < 8. COR-LO > and < 7. COR-UP > so that the vertical lines at the four corners on the screen are straight.</div> <div>(11) If the extreme upper & lower corners are little pin or barrel, chose < 9. COR-UP-S >, < 10. COR-LO-S > and adjust to get straight.</div> <div>(12) Press the [OK] key to memorize the set values.</div>
	Remote control unit			
<div></div>				
PARALLELOGRAM (TLT)	Signal generator		[4. DEF] 11.ANGLE	<div>(1) Receive the PAL cross hatch signal.</div> <div>(2) Set the ZOOM mode to REGULAR.</div> <div>(3) Select 4. DEF from the SERVICE MODE.</div> <div>(4) Select < 11. ANGLE >.</div> <div>(5) Adjust to bring the vertical lines straight.</div> <div>(6) Press the [OK] key to memorize the set values.</div>
	Remote control unit			
<div></div> <div>Bring the vertical lines straight.</div>				

Item	Measuring instrument	Test point	Adjustment part	Description
BOW	Signal generator		[4. DEF] 12. BOW	(1) Receive the PAL cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 12.BOW > . (5) Adjust to bring the vertical lines straight. (6) Press the [OK] key to memorize the set values.
	Remote control unit			
				
Bring the vertical lines straight.				
V. S-SHAPE CORRECTION & LINEARITY	Signal generator		[4. DEF] 13. V-S. CR 14. V-LIN	<ul style="list-style-type: none">When the vertical linearity has been deteriorated remarkably, perform the following steps. (1) Receive the PAL cross hatch signal. (2) Set the ZOOM mode to REGULAR. (3) Select 4. DEF from the SERVICE MODE. (4) Select < 14. V-LIN >. (5) Set the initial setting value of < 14. V-LIN >. (6) Select < 13. V-S.CR >. (7) Set the initial setting value of < 13. V-S.CR >. (8) Adjust < 14. V-LIN > and < 13. V-S.CR > so that the spaces of each line on TOP, CENTRE and BOTTOM become uniform. (9) Press the [OK] key to memorize the set values.
	Remote control unit			
				

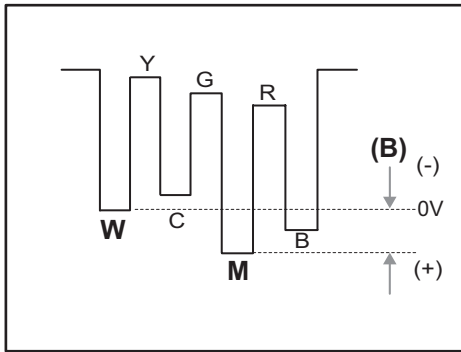
4.8.4 VIDEO CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE	Signal generator Remote control unit		[2. V/C] 2.CUTOFF R 3.CUTOFF G 4.CUTOFF B 5.DRIVE R 6.DRIVE G	<p>(1) Receive a black and white signal (colour off). (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE MODE to STANDARD. (4) Set the COLOUR TEMP to NORMAL. (5) Select 2.V/C from the SERVICE MODE. (6) Each select < 2.CUTOFF R >, < 3.CUTOFF G >, < 4.CUTOFF B > and adjust the screen until the black portion in the screen becomes black. (7) Each select < 5.DRIVE R >, < 6.DRIVE G > and adjust the screen until the white portion in the screen becomes white.</p> <p>NOTE:Do not adjust < 7.DRIVE B ></p> <p>(8) Press the [OK] key to memorize the set value. (9) Change the contrast and brightness from low-light to high-light and check that the tracking of the white balance is good.</p>
SUB BRIGHT	Remote control unit		[2. V/C] 8. BRIGHT	<p>(1) Receive any broadcast. (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of < 8.BRIGHT >. (6) If the brightness is not the best with the initial setting value, make fine adjustment until you get the best brightness. (7) Press the [OK] key to memorize the set value.</p>
SUB CONTRAST	Remote control unit		[2. V/C] 9. CONT.	<p>(1) Receive any broadcast. (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of < 9.CONT. >. (6) If the contrast is not the best with the initial setting value, make fine adjustment until you get the best contrast. (7) Press the [OK] key to memorize the set value.</p>

Item	Measuring instrument	Test point	Adjustment part	Description
SUB COLOUR	Signal generator Remote control unit		[2.V/C] 10.COLOUR	Method of adjustment without measuring instrument PAL COLOUR (1) Receive the PAL broadcast. (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of < 10.COLOUR > . (6) If the colour is not the best with the initial set value, make fine adjustment until you get the best colour. (7) Press the [OK] key to memorize the set value. SECAM COLOUR (1) Receive the SECAM broadcast. (2) Follow the same step 2 to 7 as in PAL COLOUR. NTSC 3.58 COLOUR (1) Input the NTSC 3.58MHz signal from the EXT terminal. (2) Follow the same step 2 to 7 as in PAL COLOUR. NTSC 4.43 COLOUR (1) When NTSC 3.58 COLOUR is set, NTSC 4.43 COLOUR will be automatically set.
	Signal generator Oscilloscope Remote control unit	TP-47B TP-E [CRT SOCKET PWB]	[2.V/C] 10.COLOUR	Method of adjustment using measuring instrument PAL COLOUR (1) Receive the PAL full field colour bar signal (75% white). (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of <10.COLOUR > . (6) Connect the oscilloscope between TP-47B and TP-E. (7) Adjust < 10. COLOUR > and bring the value of (A) in the illustration into the value shown in the table. (8) Press the [OK] key to memorize the set value. SECAM COLOUR (1) Receive the SECAM colour bar signal (75% white). (2) Follow the same step 2 to 8 as in PAL COLOUR. NTSC 3.58 COLOUR (1) Input the NTSC 3.58MHz signal (full field colour bar with 75% white) from the EXT terminal. (2) Follow the same step 2 to 8 as in PAL COLOUR. NTSC 4.43 COLOUR (1) When NTSC 3.58 COLOUR is set, NTSC 4.43 COLOUR will be automatically set.



Setting item	Adjustment value		
	PAL	SECAM	NTSC
VOLTAGE (W-B)	+6V	+7V	+8V

Item	Measuring instrument	Test point	Adjustment part	Description				
SUB HUE	Signal generator Remote control unit		[2.V/C] 11.HUE	Method of adjustment without measuring instrument NTSC 3.58 HUE (1) Input the NTSC 3.58MHz COMPOSITE VIDEO signal (full field colour bar with 75% white) from the EXT terminal. (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of < 11. HUE > . (6) If you cannot get the best hue with the initial setting value, make fine adjustment until you get the best hue. (7) Press the [OK] key to memorize the set value. NTSC 4.43 HUE (1) When NTSC 3.58 HUE is set, NTSC 4.43 HUE will be automatically set at the respective values.				
	Signal generator Oscilloscope Remote control unit	TP-47B TP-E [CRT SOCKET PWB]	[2.V/C] 11.HUE	Method of adjustment using measuring instrument NTSC 3.58 HUE (1) Input the NTSC 3.58MHz signal (full field colour bar with 75% white) from the EXT terminal. (2) Set the ZOOM mode to REGULAR. (3) Set the PICTURE mode to STANDARD. (4) Select 2.V/C from the SERVICE MODE. (5) Set the initial setting value of < 11. HUE > . (6) Connect the oscilloscope between TP-47B and TP-E. (7) Adjust < 11. HUE > and bring the value of (B) in the illustration into the value shown in the table. (8) Press the [OK] key to memorize the set value. NTSC 4.43 HUE (1) When NTSC 3.58 HUE is set, NTSC 4.43 HUE will be automatically set.				
<div></div> <table><thead><tr><th>Setting item</th><th>Adjustment value</th></tr></thead><tbody><tr><td>VOLTAGE (W-M)</td><td>+4V</td></tr></tbody></table>				Setting item	Adjustment value	VOLTAGE (W-M)	+4V	
Setting item	Adjustment value							
VOLTAGE (W-M)	+4V							
COLOUR DECODER VCO	Signal generator Remote control unit		[2. V/C] 13.SC ADJ	 				

4.8.5 VSM PRESET SETTING

Item	Measuring instrument	Test point	Adjustment part	Description
VSM PRESET	Remote control unit		[5. VSM PRESET] 1. CONT 2. BRIGHT 3. SHARP 4. COLOUR 5. HUE 1. DRIVE R 2. DRIVE G 3. DRIVE B	(1) Select 5. VSM PRESET from the SERVICE MODE. (2) Set the PICTURE MODE to BRIGHT. (3) Select < 1.CONT >. (4) Set the initial setting value of PICTURE MODE, as shown in the below table. (5) Press the [OK] key to memorize the set value. (6) Select < 2.BRIGHT > to < 5.HUE > in turn, and set the values. (7) Respectively select the "SOFT" and "STANDARD". Make similar adjustment as same step as above. (8) Press the [OK] key to set the COLOUR TEMP to COOL. (9) Select < 1.DRIVE R >. (10) Set the initial setting value of COLOUR TEMP., as shown in the below table. (11) Press the [OK] key to memorize the set value. (12) Select < 2.DRIVE G > and < 3.DRIVE B > in turn, and set values. (13) Respectively select the "WARM" and "NORMAL". Make similar adjustment as same step as above.

■ VSM PRESET TABALE

Item	Variable range	Setting value					
		PICTURE MODE			COLOUR TEMP.		
		BRIGHT	STANDARD	SOFT	COOL	NORMAL	WARM
1.CONTRAST	-16~+16	+16	+5	-3	---	---	---
2.BRIGHT	-16~+16	0	0	0	---	---	---
3.SHARP	-16~+16	0	0	0	---	---	---
4.COLOUR	-16~+16	0	0	0	---	---	---
5.HUE	-16~+16	0	0	0	---	---	---
1.DRIVE R	-64~+63	---	---	---	-5	0	+6
2.DRIVE G	-64~+63	---	---	---	-5	0	0
3.DRIVE B	-64~+63	---	---	---	0	0	0

SECTION 5 TROUBLESHOOTING

5.1 SELF CHECK FUNCTIONS

5.1.1 OUTLINE

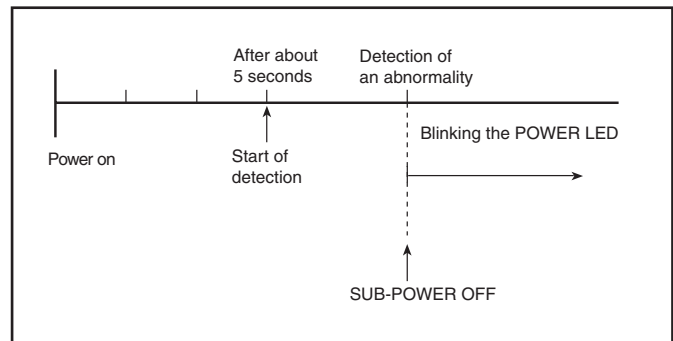
These models have self-check functions given below. When an abnormality has been detected, the SUB POWER is turned off and POWER LED is blinking. An abnormality is detected by the signal input state of the control line connected to the microcomputer.

5.1.2 SELF CHECK ITEMS

Check item	Details of detection	Method of detection	State of abnormality
Low B short protection	A short on the low B (1.8V, 3.3V) line is detected.	The protect port on the microcomputer (100pin) is always monitored at 10msec intervals. If an abnormality is detected 75 times successively, it is judged that there is an abnormality.	When an abnormality has detected, the SUB POWER is turned off and POWER LED is blinking. While the SUB POWER is being turned off, the POWER key on the remote control unit is not operational until the power cord is taken out and put in again.
CRT neck broken protection	Operation of CRT neck broken protection circuit. (Vertical amplitude is detected.)	DITTO	DITTO
X-ray protection	The rise of a high voltage value is detected.	DITTO	DITTO

5.1.3 SELF CHECK INDICATING FUNCTION

When an abnormality has been detected at about 5 seconds after the power is turned on, the SUB POWER is turned off immediately and the POWER LED begins blinking.





Victor Company of Japan, Limited
CRT Display Category 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA366)



Printed in Japan
VPT

JVC

SCHEMATIC DIAGRAMS

COLOUR TELEVISION

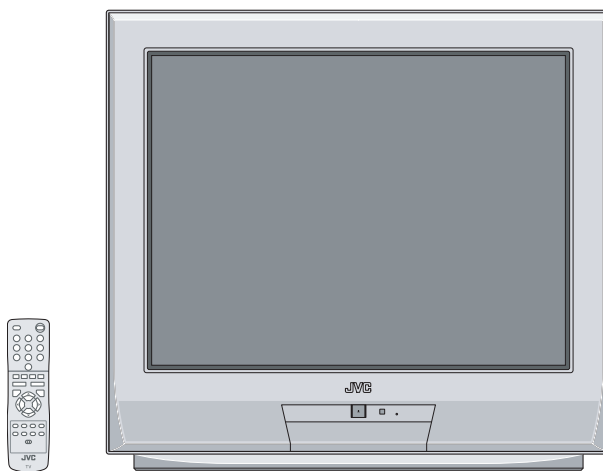
AV-29L6SU

CD-ROM No.SML200604

BASIC CHASSIS

MR

T-V LINK



AV-29L6SU

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the \triangle symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Colour bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester : DC 20k Ω /V
- (4)Oscilloscope sweeping time : H \Rightarrow 20 μ s / div
: V \Rightarrow 5ms / div
: Others \Rightarrow Sweeping time is specified
- (5)Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [k Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/16 [W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflammable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]

● Type

- No indication : Ceramic capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3)Coils

- No unit : [μ H]
- Others : As specified

(4)Power Supply



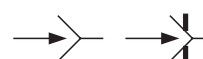
-  : B1
-  : B2 (12V)
-  : 9V
-  : 5V

* Respective voltage values are indicated





(5)Test point

-  : Test point
-  : Only test point display



(6)Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7)Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : () side GND and the ISOLATED(NEUTRAL) : () side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

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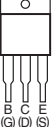
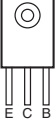

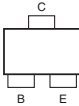
WAVEFORMS 2-28

USING P.W. BOARD


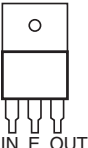
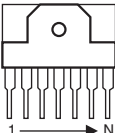
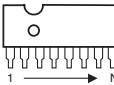
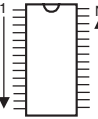
PWB ASS'Y name	AV-29L6SU
MAIN P.W. BOARD	SMR-1001A-U2
AC P.W. BOARD	SMR-2001A-U2
CRT SOCKET P.W. BOARD	SMR-3001A-U2
FRONT P.W. BOARD	SMR-7001A-U2
POWER SW P.W. BOARD	SMR-8501A-U2
SIGNAL P.W. BOARD	SMR0V001A-U2

SEMICONDUCTOR SHAPES

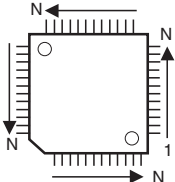
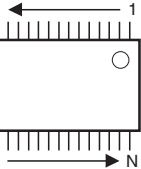
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

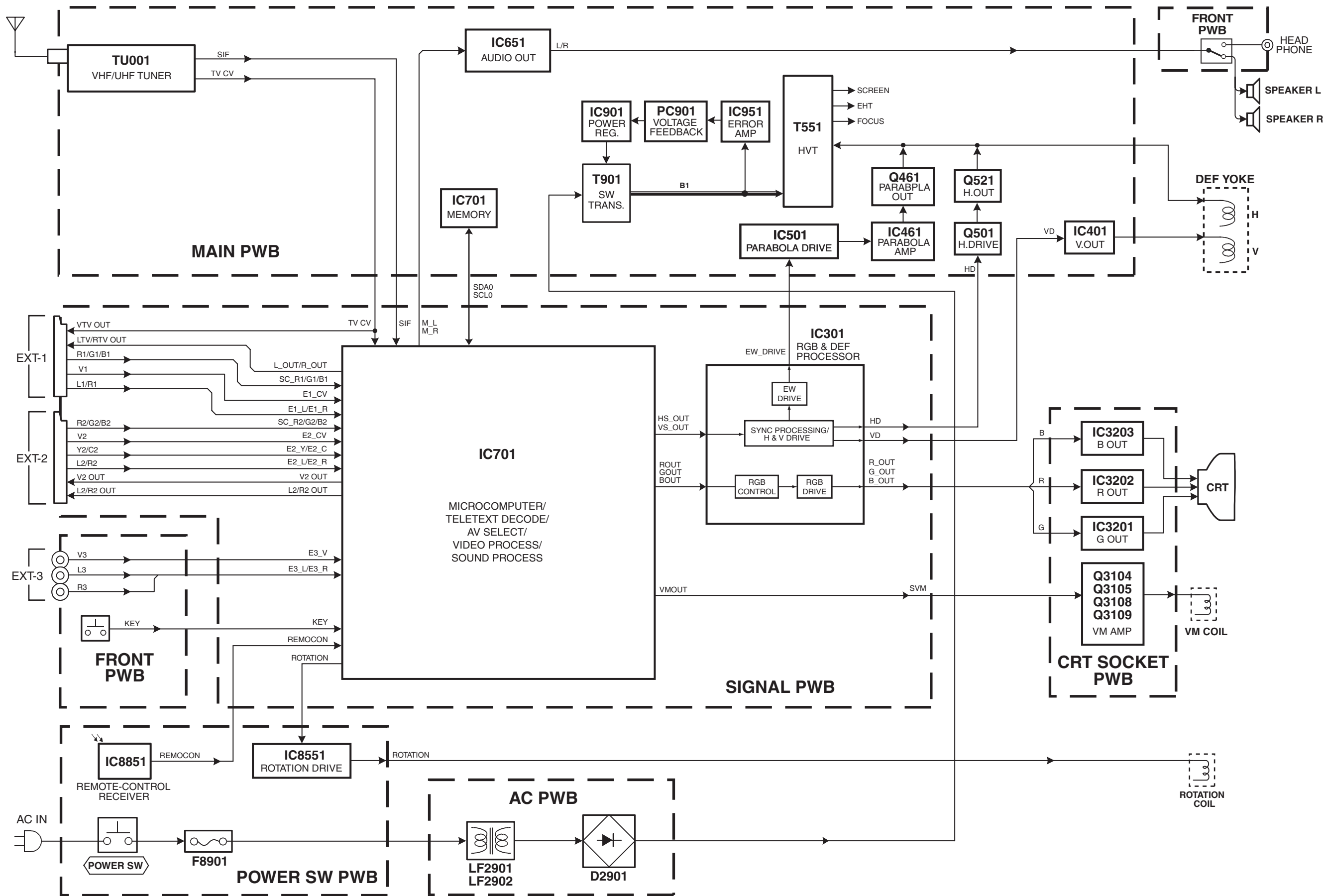
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

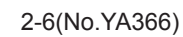
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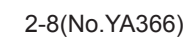
TOP VIEW		
		

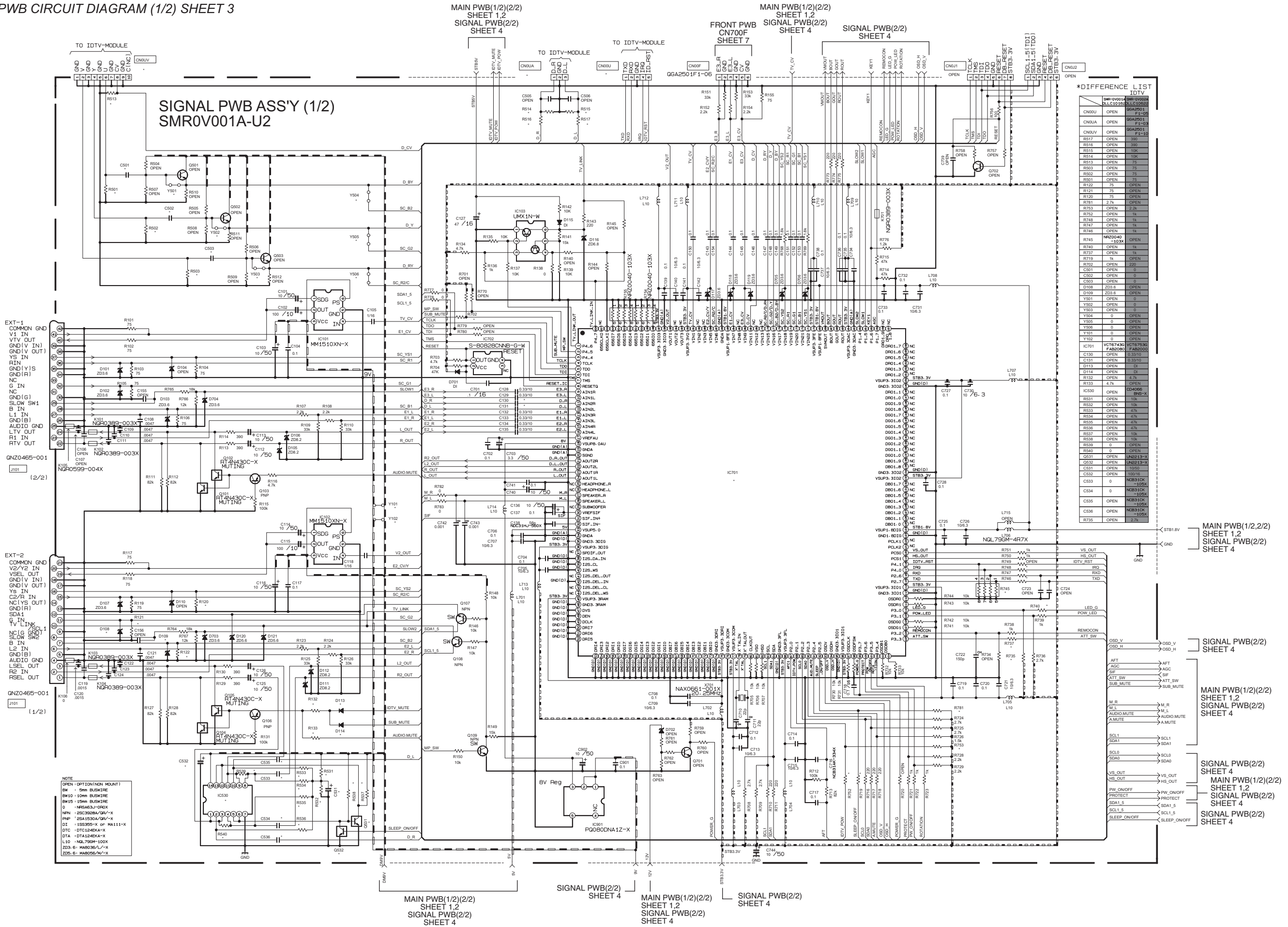
BLOCK DIAGRAM

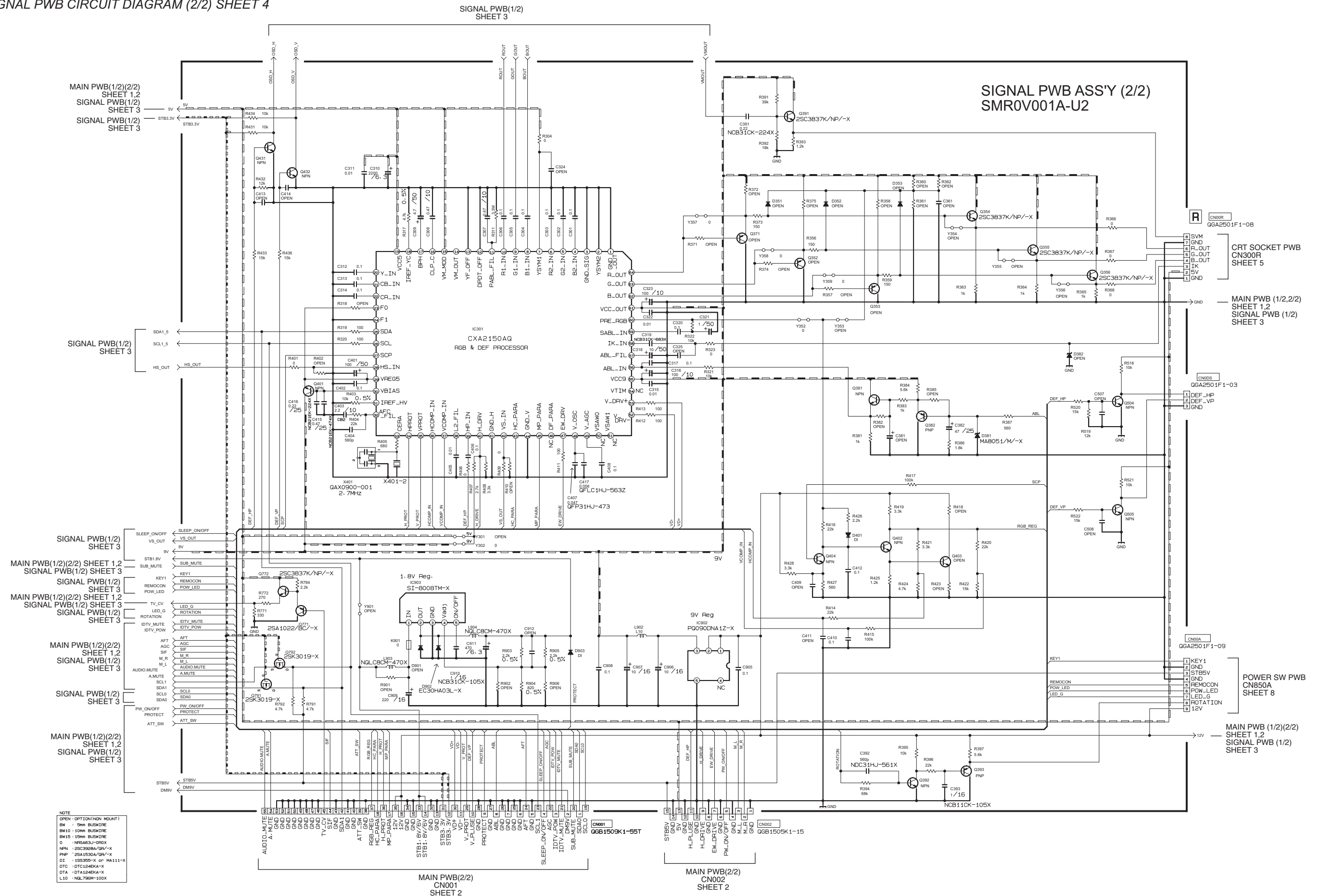


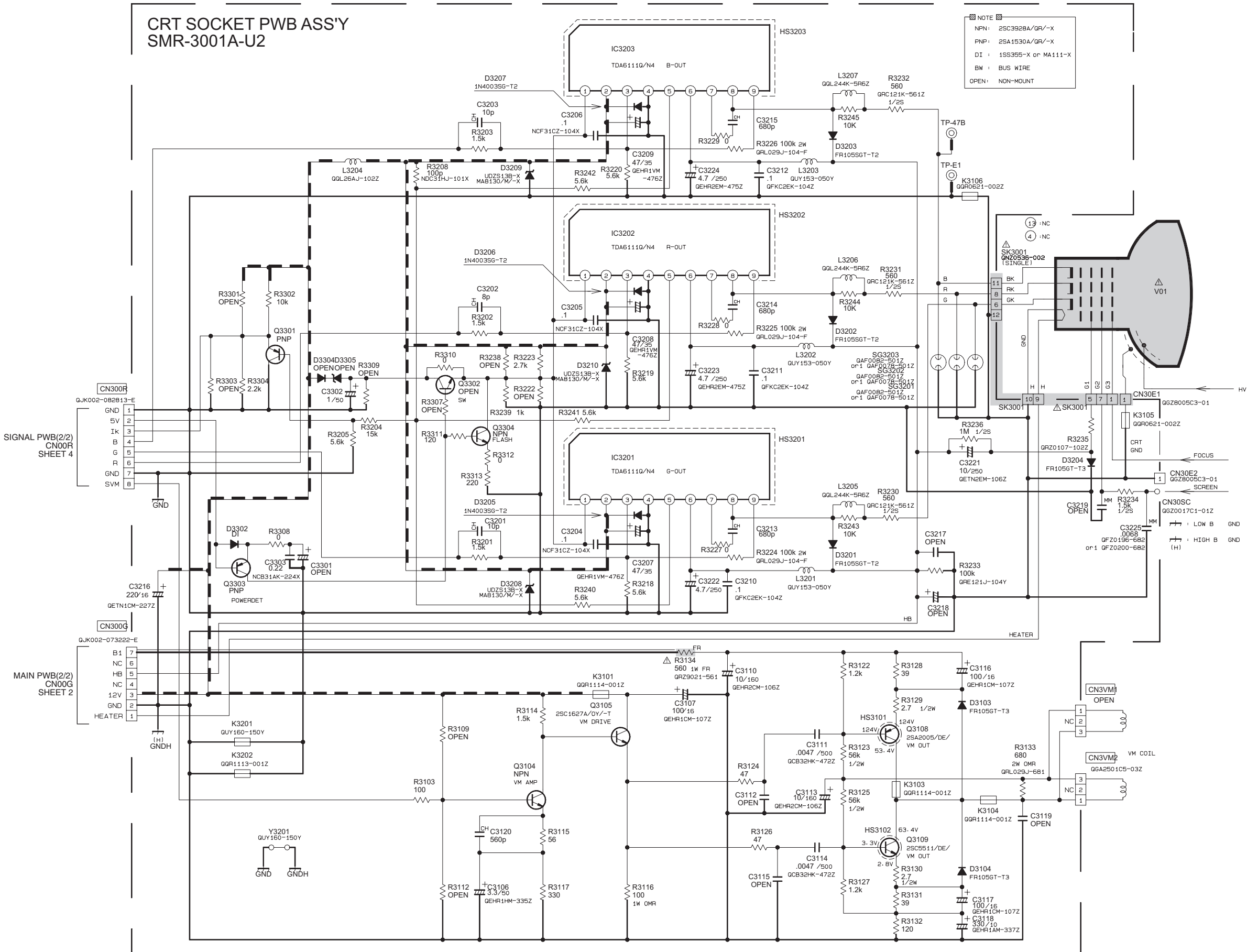
MAIN PWB CIRCUIT DIAGRAM (1/2) SHEET1

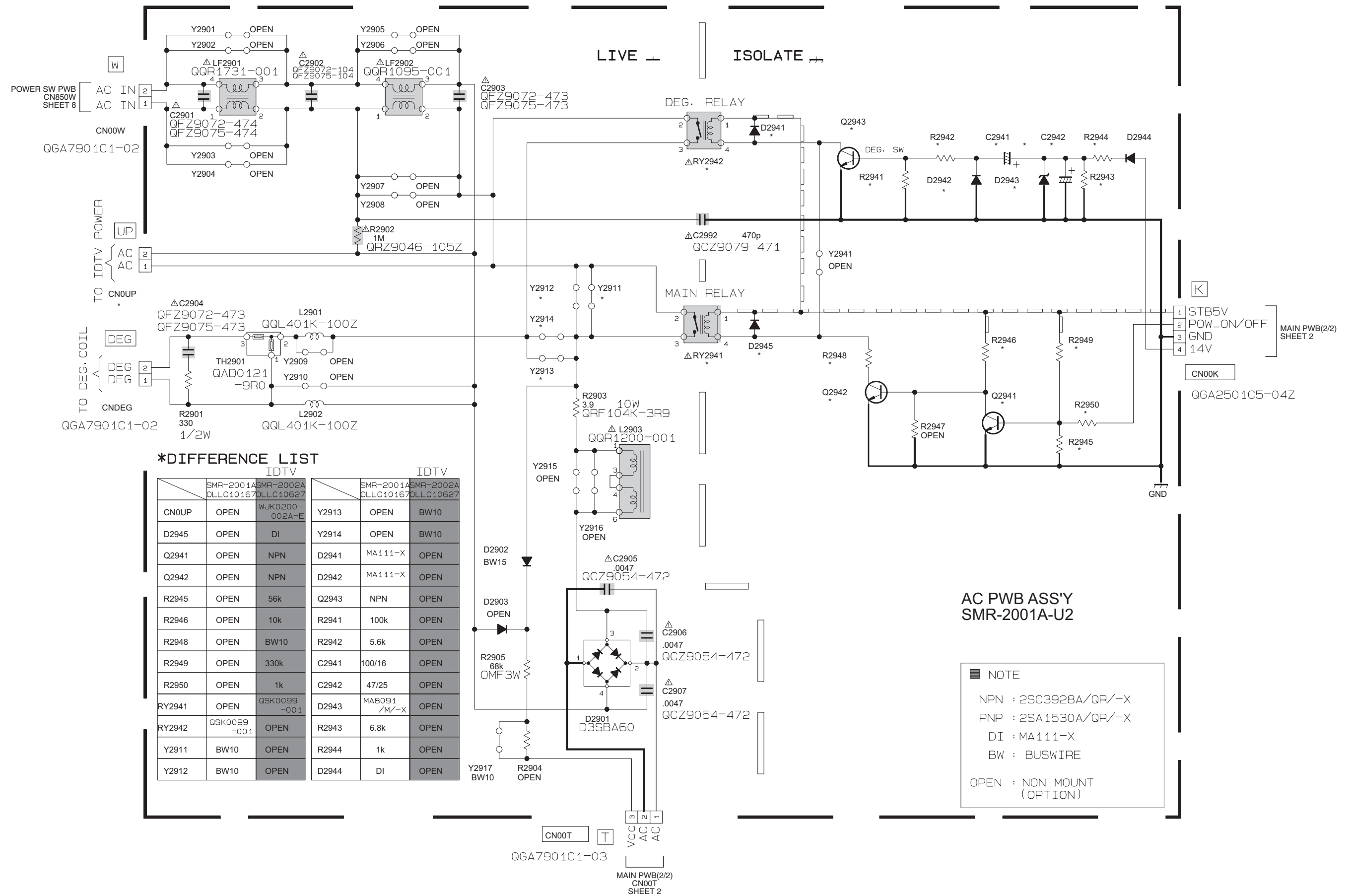


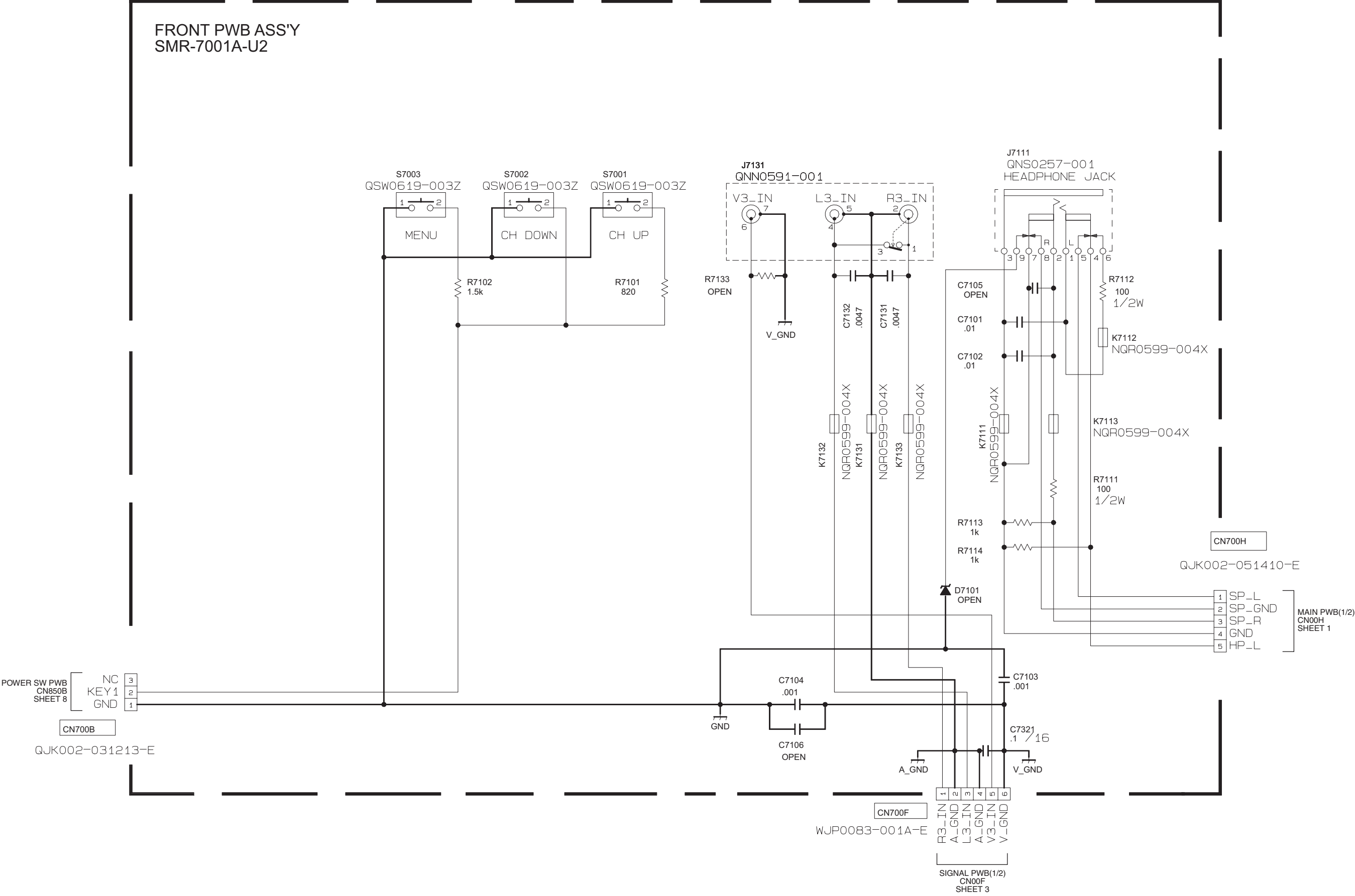








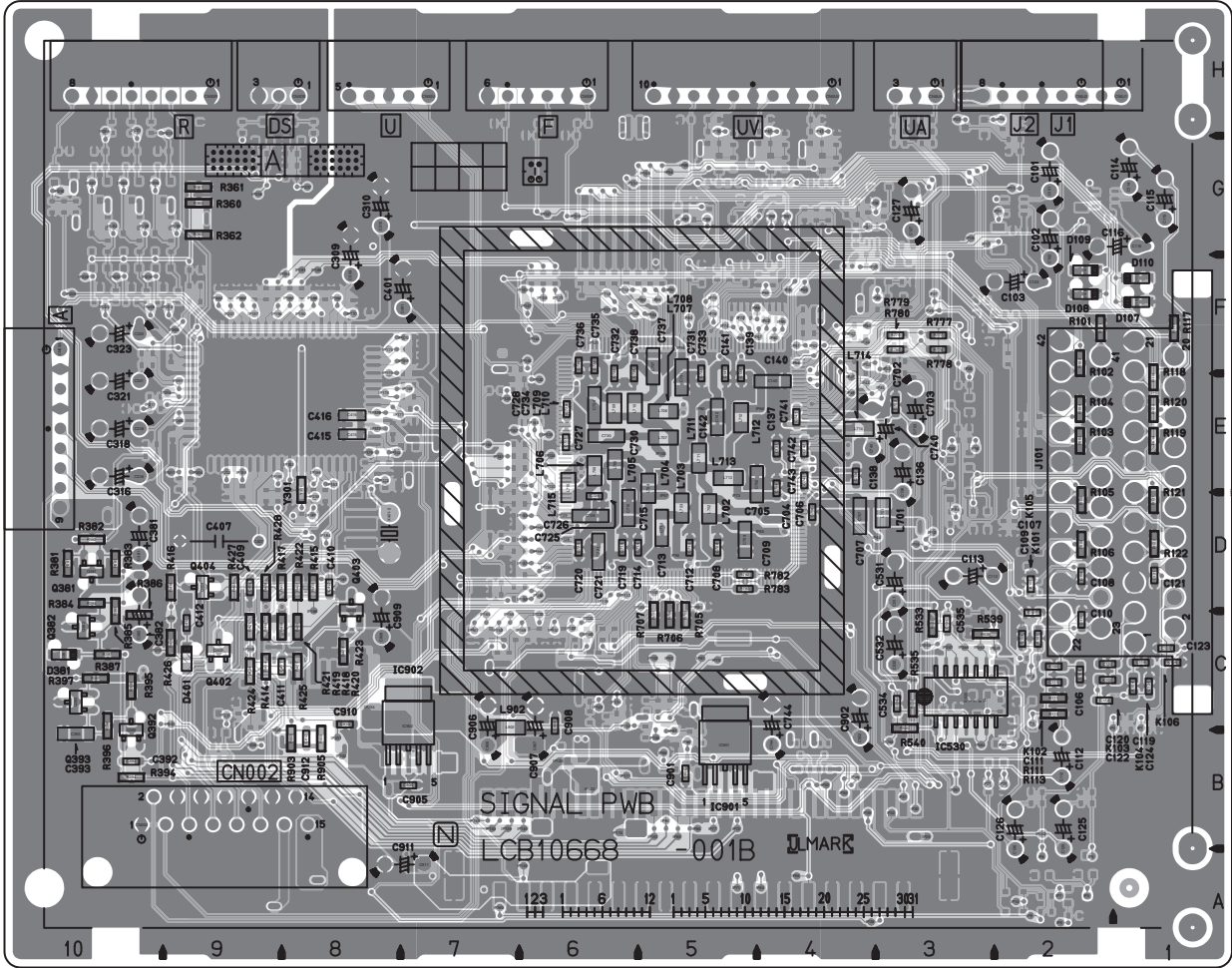




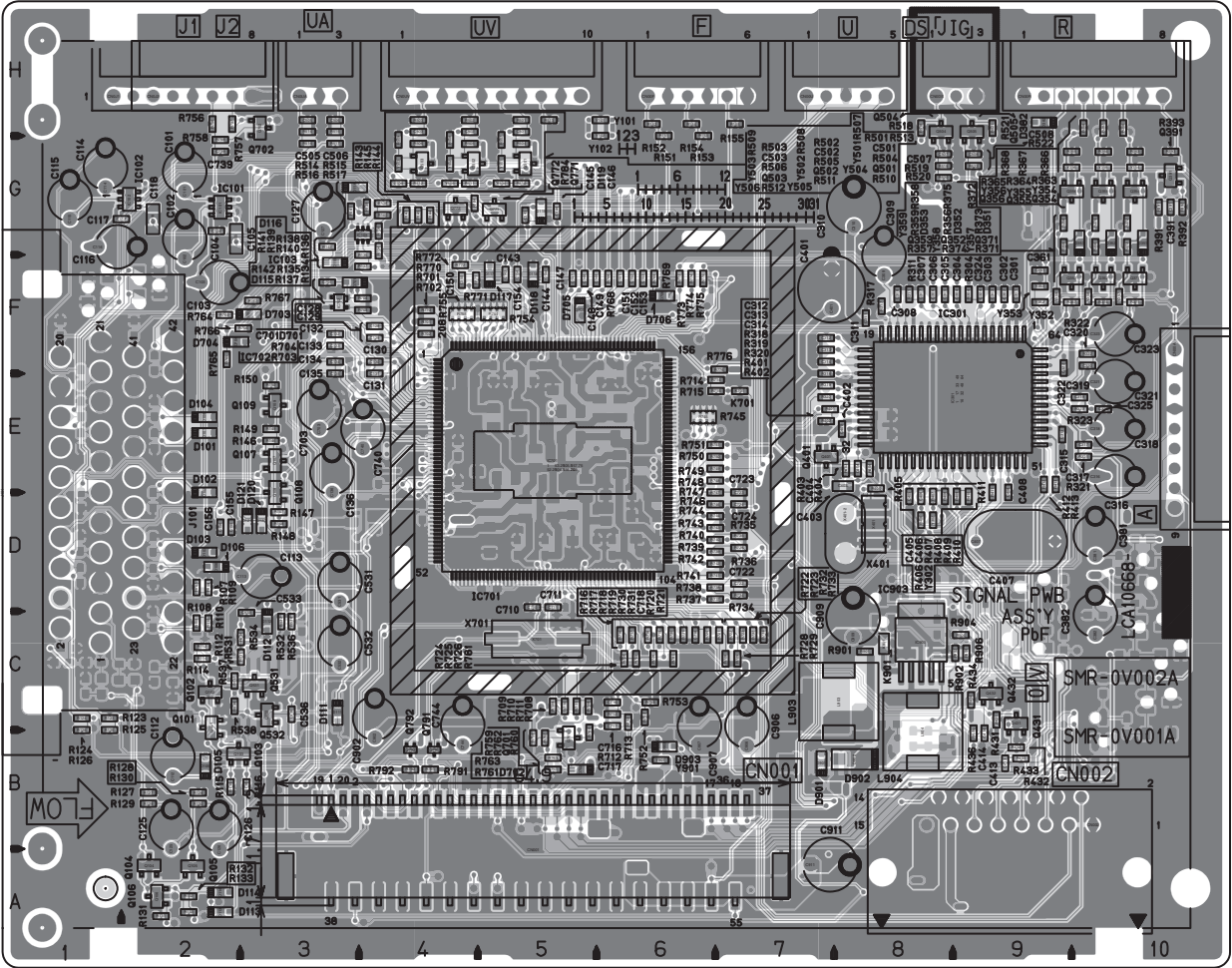
MAIN PWB PATTERN



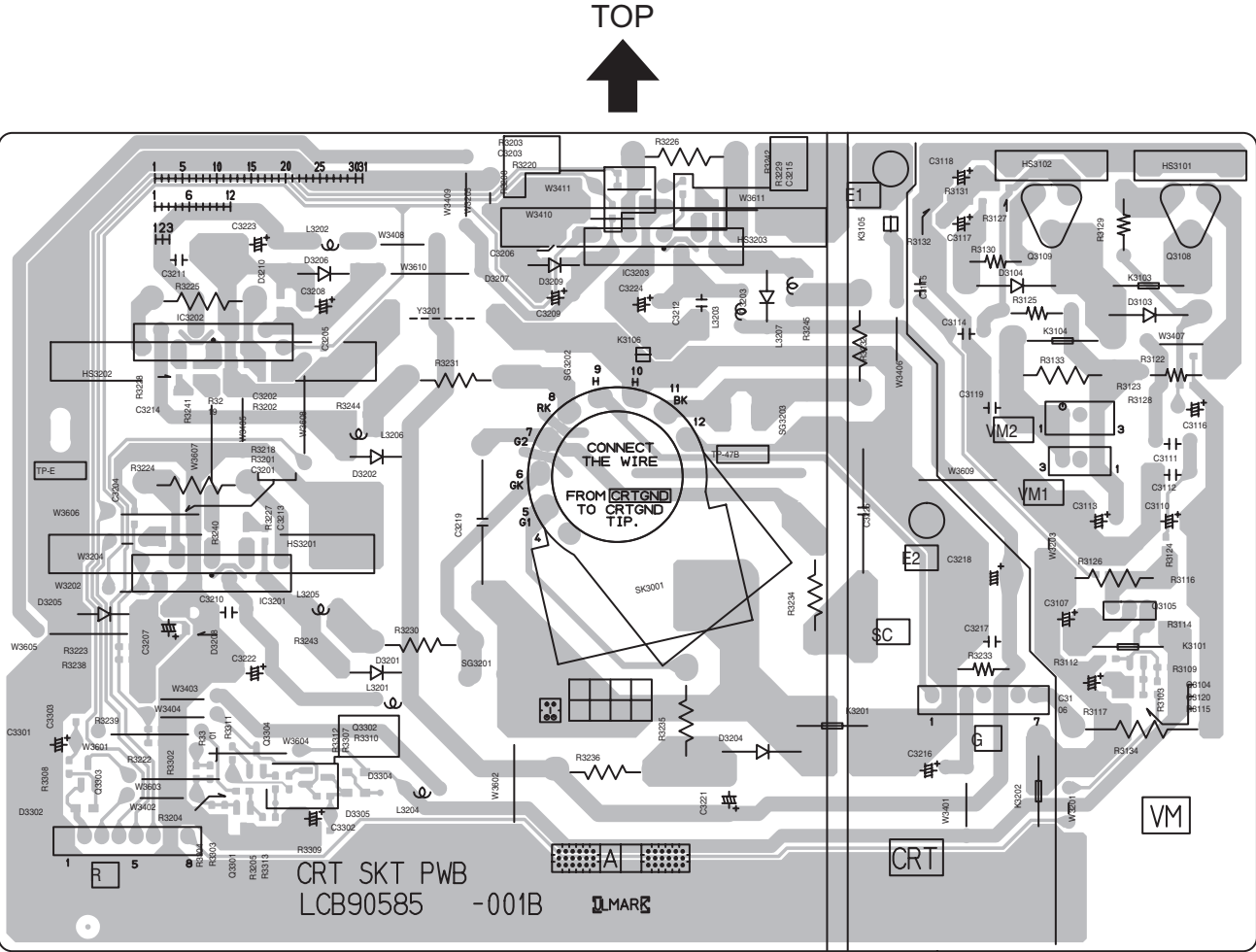
SIGNAL PWB PATTERN [SOLDER SIDE]



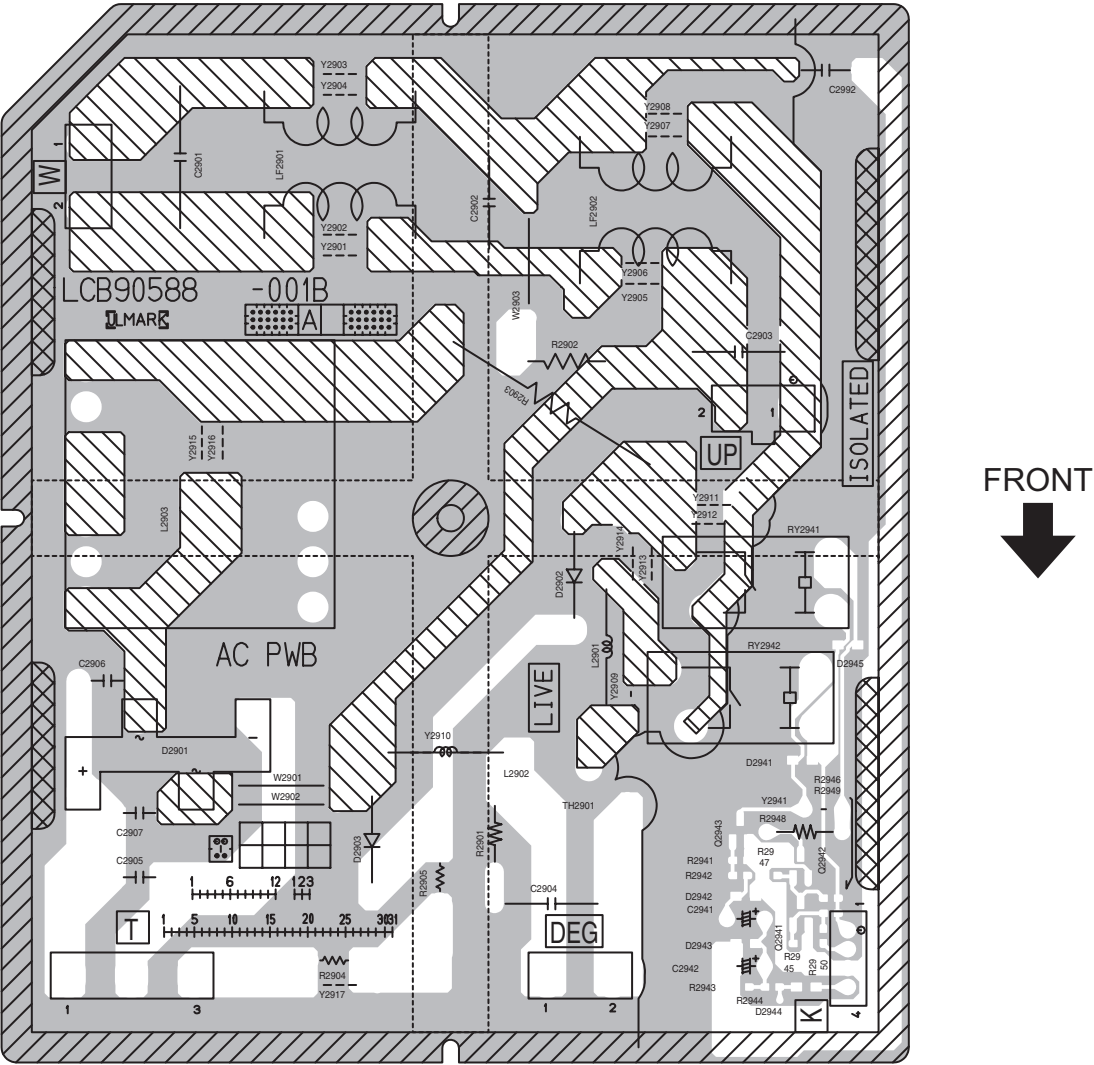
SIGNAL PWB PATTERN [PARTS SIDE]



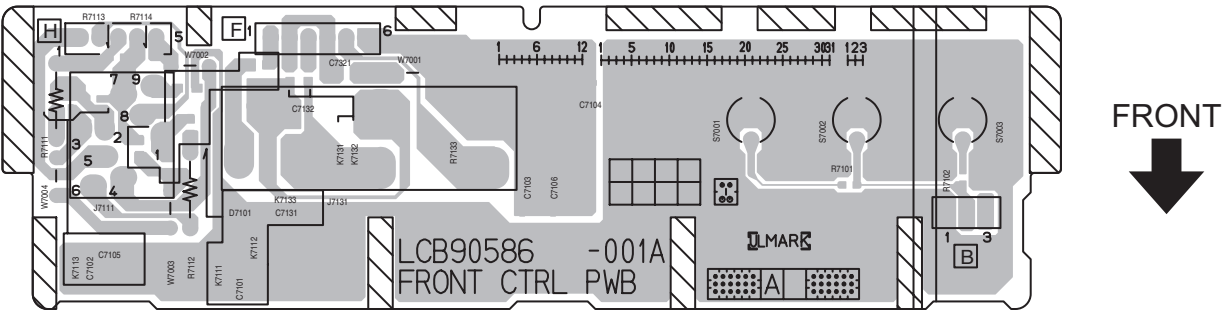
CRT SOCKET PWB PATTERN



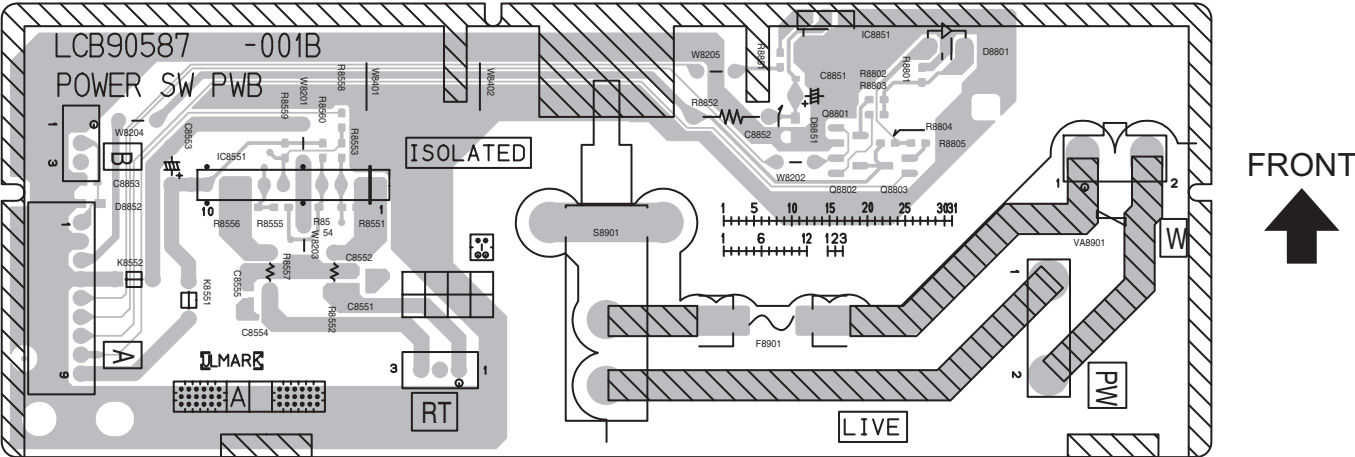
AC PWB PATTERN



FRONT PWB PATTERN



POWER SW PWB PATTERN



VOLTAGE CHARTS

<MAIN PWB>

MODE PIN NO.	DC (V)
IC651	
1	0
2	0
3	29.9
4	0
5	0
6	0
7	14.8
8	1.2
9	0
10	31.2
11	16
12	14.9
TU001	
1	NC
2	NC
3	4.7
4	NC
5	NC
6	NC
7	2.8
8	1.7
9	NC
10	3
11	2.6
12	2.1
13	2.3
14	1.9
15	34.4
16	0
17	1.7
18	0
19	0
20	0
21	0
Q001	
E	0
C	5.7
B	3.7
Q002	
E	8.7
C	0
B	9.3
Q003	
E	0
C	9.3
B	3.6
Q628	
E	0
C	4.2
B	0.1
Q629	
E	0
C	0
B	0.6
Q632	
E	8.2
C	-0.3
B	8.2

[P.2-7-P.2-8]

MODE PIN NO.	DC (V)
IC401	
1	0.8
2	16.6
3	-13.5
4	-16.9
5	0.4
6	17.6
7	0.8
IC461	
1	3.8
2	0.7
3	2
4	0
5	6.1
6	3.8
7	9.8
8	11.9
IC501	
1	6.1
2	4.8
3	4.8
4	11.9
5	8.7
6	8.7
7	10.7
8	0.6
9	2.4
10	2.1
11	0
12	0
13	3.8
14	3.5
IC701	
1	0
2	0
3	0
4	0
5	1.9
6	2.1
7	0
8	3.3
IC901	
1	281
2	0
3	0
4	18.9
5	0.1
6	1.2
7	0.7
IC951	
1	141.8
2	7
3	0
IC961	
1	13.7
2	3.5
3	11.9
4	NC
5	0
IC971	
1	5
2	0
3	0
4	3.4
5	8.7
6	0
7	8.7
IC972	
1	7
2	4.9
3	0
4	3.7
IC973	
1	0.7
2	3.3
3	0
4	0.8
5	3.6
Q460	
E	0.7
C	11.9
B	0.5
Q461	
S	0
D	25
G	8.8
Q462	
E	0
C	2.3
B	0.4
Q464	
E	2.3
C	0
B	2.9
Q481	
E	0
C	0

MODE
PIN NO.

DC (V)
B
2
Q482
E
0
C
2.3
B
0
Q501
S
0
D
42.8
G
2.1
Q521
E
0
C
139
B
0
Q581
E
141.8
C
0.1
B
141.4
Q582
E
0
C
2.3
B
0
Q583
E
0
C
2.3
B
0
Q955
E
151.9
C
8.8
B
152.7
Q958
E
0
C
142.4
B
0.1
Q959
E
0
C
6.5
B
0
Q990
E
0
C
3.8
B
0.1
Q991
E
0
C
0
B
0.6
PC 901
1
8.1
2
7.1
3
8.2
4
18.9

<SIGNAL PWB>

MODE PIN NO.	DC (V)
IC101	
1	2.9
2	3
3	8.9
4	2.6
5	0
6	8.9
IC102	
1	2.9
2	2.9
3	8.9
4	2.6
5	0
6	8.9
IC103	
1	0
2	0
3	2.7
4	0
5	0
6	0
IC702	
1	*
2	3.3
3	NC
4	0
IC901	
1	8.9
2	8.9
3	8
4	0
5	0
Q001	
E	0
C	0
B	-0.8
Q002	
E	0
C	0
B	-1
Q003	
E	0
C	-1.2
B	0
Q004	
E	0
C	0
B	-0.3
Q005	
E	0
C	0
B	-0.5
Q006	
E	0
C	-0.6
B	0
Q007	
E	0.2
C	2.5
B	0
Q008	
E	3
C	2.9
B	0
Q009	
E	0
C	0
B	0.6

[P.2-11-P.2-12]

MODE PIN NO.	DC (V)
IC301	
1	0
2	0
3	0
4	3.1
5	3.1
6	3.1
7	4.9
8	3.8
9	3.8
10	3.8
11	0
12	0
13	0
14	NC
15	4.9
16	2.7
17	2.6
18	1.2
19	4.9
20	3.3
21	3.3
22	3.3
23	*
24	0
25	2.5
26	3
27	1.2
28	0.2
29	5
30	5.7
31	1.3
32	3.2
33	*
34	0
35	0.7
36	3.3
37	2.4
38	3.4
39	2.1
40	2.1
41	0
42	0
43	4
44	0
45	0
46	NC
47	0
48	4.4
49	5.2
50	NC
51	NC
52	3.3
53	3.4
54	NC
55	8.9
56	4.8
57	4.9
58	3.9
59	2.3
60	1.5
61	8.9
62	2.6
63	2.5
64	2.8
IC902	
1	11.9
2	11.9
3	8.9
4	NC
5	0
IC903	
1	8.7
2	1.8
3	0
4	0.8
5	3.5
Q354	
E	2.2
C	8.9
B	2.7
Q355	
E	2
C	8.9
B	2.5
Q356	
E	2.1
C	8.9
B	2.6
Q381	
E	4.7
C	8.9
B	5.3
Q382	
E	5.4
C	0
B	4.7

MODE
PIN NO.

DC (V)
Q391
E
1.9
C
8.9
B
2.6
Q392
E
0
C
3.8
B
-0.6
Q939
E
5.6
C
0
B
4.9
Q401
E
5
C
8.9
B
5.7
Q402
E
1
C
6.1
B
1.6
Q404
E
1.7
C
1.5
B
0.8
Q431
E
0
C
2.6
B
-0.1
Q432
E
0
C
3.1
B
-1.5
Q504
E
0
C
3.9
B
-0.1
Q505
E
0
C
4.6
B
-1.6
Q771
E
2.4
C
0
B
1.7
Q772
E
0
C
4.9
B
2.4
Q791
S
1.7
D
2.5
G
3.3
Q792
S
2.1
D
3
G
3.3
CN001
1
1.9
2
8.9
3
0
4
1.2
5
0
6
0
7
0
8
4.7
9
2.4
10
-1.5
11
3.3
12
3.3
13
0
14
8.7
15
0
16
11.9
17
0
18
3.6
19
2.1
20
0
21
0
22
1.7
23
3
24
2.1
25
0
26
0
27
0
28
0
29
0.7
30
3.4
31
3.3
32
0
33
8.7
34
0
35
11.9
36
0
37
6.1
38
0
39
0
40
0

MODE
PIN NO.

DC (V)
41
0
42
2.5
43
0
44
1.5
45
1.7
46
0
47
0
48
0
49
0
50
0
51
0
52
0
53
0
54
0.1
55
0.1
CN002
1
0
2
3.7
3
3.7
4
0
5
0.1
6
0
7
3.9
8
0
9
2.1
10
0
11
0
12
0
13
4.9
14
0
15
5

<AC>

MODE PIN NO.	DC (V)
Q2943	
E	0
C	5
B	0

<POWER SW>

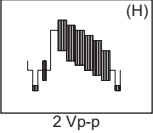
MODE PIN NO.	DC (V)
IC8551	
1	6.4
2	6.4
3	6.4
4	6.4
5	0
6	6.5
7	6.4
8	6.4
9	6.4
10	11.9
IC8851	
1	3.7
2	5
3	0
Q8801	
E	0
C	3.2
B	0.1

<CRT SOCKET PWB>

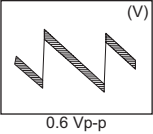
P.213-P.214	
MODE PIN NO.	DC (V)
IC3201	
1	3.2
2	11.8
3	3.2
4	0
5	8.4
6	210
7	122
8	124
9	121
IC3202	
1	3.2
2	11.8
3	3.2
4	0
5	8.5
6	7
7	116
8	118
9	115
IC3203	
1	3.2
2	11.8
3	3.2
4	0
5	8.4
6	210
7	122
8	124
9	121
Q3104	
E	1.2
C	6.6
B	1.8
Q3105	
E	5.9
C	11.9
B	6.6
Q3108	
E	130.3
C	66.9
B	129.7
Q3109	
E	3
C	66.8
B	3.5
Q3301	
E	1.7
C	0
B	2.1
Q3303	
E	4.7
C	-2.8
B	4.9
Q3304	
E	0
C	3.1
B	-3

WAVEFORMS

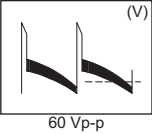
MAIN PWB(1/2)
TU001-17



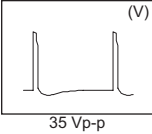
MAIN PWB(2/2)
IC401-1



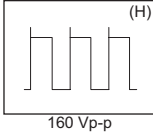
IC401-5



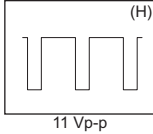
IC401-6



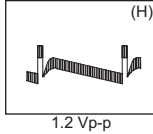
Q461-D



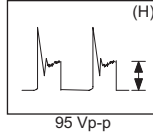
Q461-G



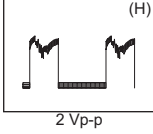
Q461-S



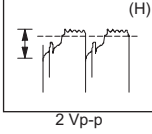
Q501-D



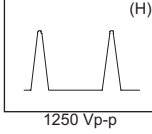
Q501-G



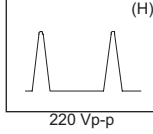
Q521-B



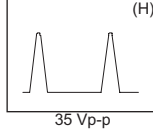
Q521-C



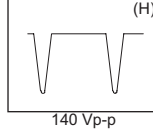
T551-2



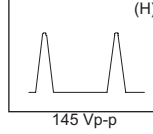
T551-4



T551-6

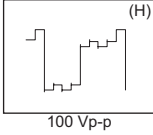


T551-7

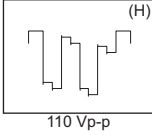


CRT SOCKET PWB

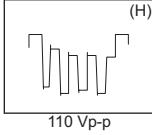
IC3201-8



IC3202-8

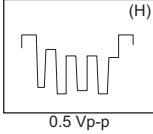


IC3203-8

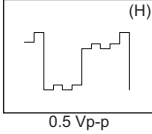


SIGNAL PWB(2/2)

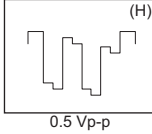
IC301-8



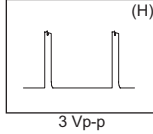
IC301-9



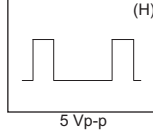
IC301-10



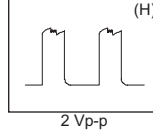
IC301-28



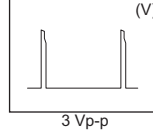
IC301-39



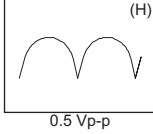
IC301-40



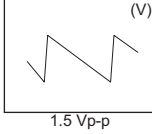
IC301-42



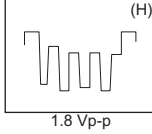
IC301-47



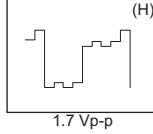
IC301-53



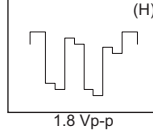
IC301-62



IC301-63



IC301-64





Victor Company of Japan, Limited
CRT Display Category 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama-city, kanagawa-prefecture, 221-8528, Japan

(No.YA366)



Printed in Japan
VPT

PARTS LIST

CAUTION

- The parts identified by the Δ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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PACKING PARTS LIST	3-12

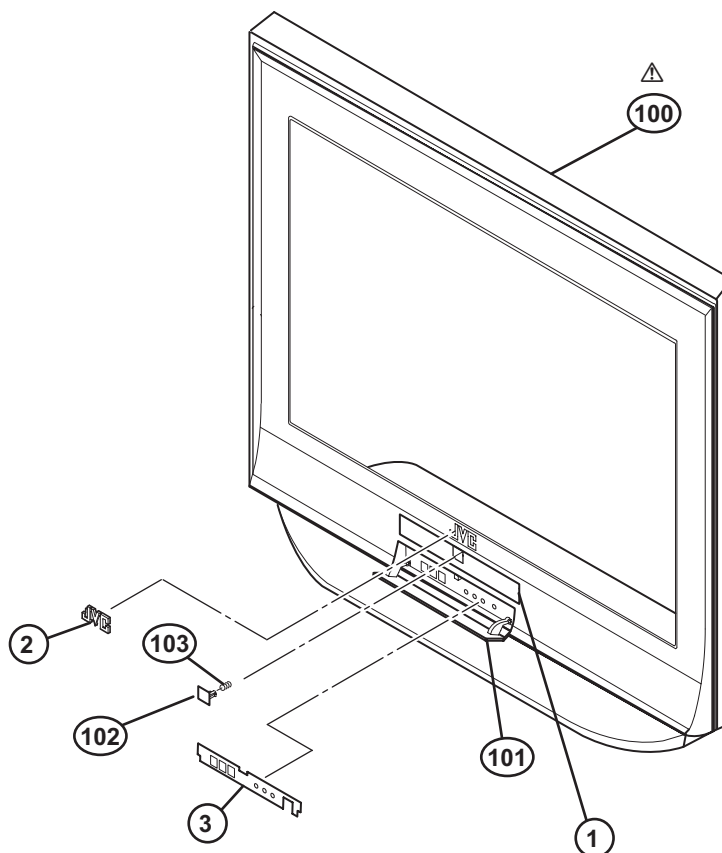
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	AV-29L6SU
MAIN P.W.B	SMR-1001A-U2
AC P.W.B	SMR-2001A-U2
CRT SOCKET P.W.B	SMR-3001A-U2
FRONT P.W.B	SMR-7001A-U2
POWER SW P.W.B	SMR-8501A-U2
SIGNAL P.W.B	SMR0V001A-U2
REMOTE CONTROL UNIT	RM-C1502-2C

EXPLODED VIEW PARTS LIST -1

△	Ref.No.	Part No.	Part Name	Description	Local
	1	LC22066-001B-C	WINDOW		
	2	LC41852-001B	JVC MARK ASSY		
	3	LC33439-001B-C	OPERATION SHEET		
△	100	LC12652-001A-U	FRONT CABINET ASSY		
	101	LC12633-002C-U	DOOR		
	102	LC33400-002C-U	POWER KNOB		
	103	GA30013-001A-U	SPRING		

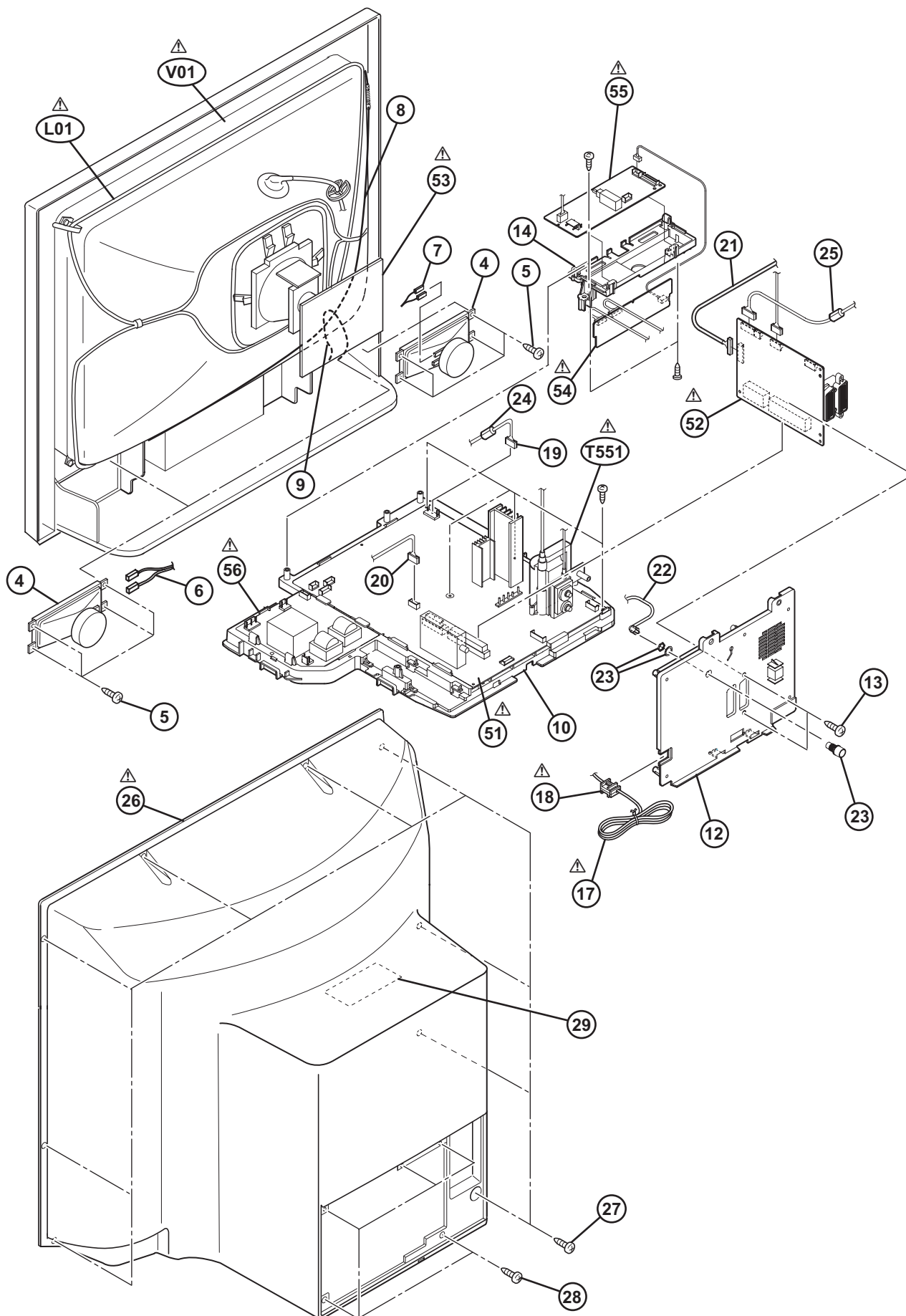
EXPLODED VIEW -1



EXPLODED VIEW PARTS LIST -2

△	Ref.No.	Part No.	Part Name	Description	Local
△	V01	A68QFZ893X002	PICTURE TUBE(ITC)		Inc. DEF YOKE/PC MAGNET
△	L01	QQW0212-001	DEG COIL		
△	T551	QQH0210-001	FB TRANSFER		
	4	QAS0326-001	SPEAKER	SP01/SP02(x2)	
	5	QYSBSAG4016NA	TAP SCREW	M4 x 16mm(x8)	
	6	WJJ0555-005A-E	E-SI C WIRE C-C	MAIN CN0SR-SPEAKER	
	7	WJJ0467-002B-E	E-SI C WIRE C-C	MAIN CN0SL-SPEAKER	
	8	WJY0021-003B-E	E-BRAIDED ASSY		
	9	WJY0013-005A-E	E-BRAIDED ASSY		
	10	LC12600-001B-U	CHASSIS BASE		
	12	LC12632-001B-U	AV TERMINAL BOARD		
	13	QYSBSF3012MA	TAP SCREW	M3 x 12mm(x2)	
	14	LC12637-001B-U	CONTROL BASE		
△	17	QMPK160-185-JC	POWER CORD(EU)	1.85m BLACK	
△	18	LC21383-001C-U	POWER CORD CLAMP		
	19	WJJ0100-005A-E	E-SI C WIRE C-C		
	20	QJJ008-042214-E	SIN CR C-C WIRE	MAIN CN00K-POWER CN00K	
	21	WJJ0712-001A-E	SIN CR C-C WIRE	SIGNAL CN00A-FRONT SW CN850A	
	22	WJX0038-002A-E	E-COAXIAL ASSY	ANTENNA TERMINAL-TUNER	
	23	QNB0112-002	ANTENNA TERMINAL		
	24	QQR0491-001	FERRITE CORE		
	25	QQR0491-001	FERRITE CORE		
△	26	LC12599-001B-U	REAR COVER		
	27	QYSBSAG4016NA	TAP SCREW	M4 x 16mm(x9)	
	28	QYSBSAG4016NA	TAP SCREW	M4 x 16mm(x5)	
	29	LC33544-001A-C	PANEL		
△	51	SMR-1001A-U2	MAIN PWB		
△	52	SMR0V001A-U2	SIGNAL PWB		
△	53	SMR-3001A-U2	CRT SOCKET PWB		
△	54	SMR-7001A-U2	FRONT PWB		
△	55	SMR-8501A-U2	POWER SW PWB		
△	56	SMR-2001A-U2	AC PWB		

EXPLODED VIEW -2



PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SMR-1001A-U2)

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
IC401	LA78045-E	IC	(SERVICE)		C007	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
IC461	LM393DR-X	IC			C010	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
IC501	LM324D-X	IC			C011	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
IC651	AN5277	IC			C012	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
IC701	ATE32-29L6SU	IC			C013	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
IC901	STR-X6750F-F2	IC			C014	NCB31HK-821X	C CAPACITOR	820pF 50V K	
IC951	SE140N	IC			C015	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
IC961	PQ120DNA1Z-X	IC			C016	NDC31HJ-470X	C CAPACITOR	47pF 50V J	
IC971	MM1565AF-X	IC			C017	NDC31HJ-180X	C CAPACITOR	18pF 50V J	
IC972	PQ050RDA1SZ	IC			C018	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
IC973	SI-8008TFE-F3	IC			C117	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
Q001	2SC3928A/QR/-X	TRANSISTOR			C404	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
Q002	2SC3928A/QR/-X	TRANSISTOR			C405	QDC31HJ-820Z	C CAPACITOR	82pF 50V J	
Q003	2SC3928A/QR/-X	TRANSISTOR			C406	QETM1HM-108	E CAPACITOR	1000uF 50V M	
Q460	KTC3199/YG/-T	TRANSISTOR			C408	QETN1HM-337Z	E CAPACITOR	330uF 50V M	
Q461	2SK2417	POWER MOS FET			C409	QFVF1HJ-474Z	MF CAPACITOR	0.47uF 50V J	
Q462	KTC3199/YG/-T	TRANSISTOR			C410	QFVF1HJ-474Z	MF CAPACITOR	0.47uF 50V J	
Q463	2SA1530A/QR/-X	TRANSISTOR			C411	QFLC2AJ-104Z	M CAPACITOR	0.1uF 100V J	
Q464	KTA1267/YG/-T	TRANSISTOR			C414	QCB31HK-682Z	C CAPACITOR	6800pF 50V K	
Q481	DTC124EKA-X	DIGI TRANSISTOR			C415	QDC31HJ-470Z	C CAPACITOR	47pF 50V J	
Q482	KTC3199/YG/-T	TRANSISTOR			C461	QEZ0470-475	BP E CAPACITOR	4.7uF 50V M	
Q501	BSN304-T	MOS FET			C462	QFN32DJ-152Z	M CAPACITOR	1500pF 200V J	
Q521	2SC5905-RL	POW TRANSISTOR			C463	QFN32DJ-152Z	M CAPACITOR	1500pF 200V J	
Q581	2SA1208/ST/Z1-T	TRANSISTOR			C464	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
Q582	DTC144EKA-X	DIGI TRANSISTOR			C465	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
Q583	KTC3199/YG/-T	TRANSISTOR			C466	QFP31HJ-332Z	PP CAPACITOR	3300pF 50V J	
Q628	2SC3928A/QR/-X	TRANSISTOR			C468	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
Q629	2SC3928A/QR/-X	TRANSISTOR			C471	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
Q632	2SA1530A/QR/-X	TRANSISTOR			C481	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
Q955	2SA1668/OYG/-	POW TRANSISTOR			C499	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
Q958	2SC4015/N/-T	SI TRANSISTOR			C501	QCB32HK-331Z	C CAPACITOR	330pF 500V K	
Q959	2SC3928A/QR/-X	TRANSISTOR			C502	QFN32DK-103	M CAPACITOR	0.01uF 200V K	
Q990	KTC3199/YG/-T	TRANSISTOR			C503	QFVF1HJ-224Z	MF CAPACITOR	0.22uF 50V J	
Q991	2SC3928A/QR/-X	TRANSISTOR			C506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
					C507	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
					C508	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
D402	1SR35-400A-T2	SI DIODE			C521	QFZ0122-112	MPP CAPACITOR	1100pF 1.8kV H	
D461	FR105GT-T3	SI DIODE			C522	QFZ0196-133	MPP CAPACITOR	0.013uF 1.5kV H	
D462	MA111-X	SI DIODE			C523	QFN32DJ-473	M CAPACITOR	0.047uF 200V J	
D463	MA111-X	SI DIODE			C524	QFP32JJ-273	PP CAPACITOR	0.027uF 630V J	
D465	MA111-X	SI DIODE			C525	QFZ0197-514	MPP CAPACITOR	0.51uF 250V J	
D481	MA111-X	SI DIODE			C526	QFZ0197-374	MPP CAPACITOR	0.37uF 250V J	
D501	1SS244-T2	SI DIODE			C527	QFZ0197-254	MPP CAPACITOR	0.25uF 250V J	
D521	V11CA-C1	SI DIODE			C529	QFZ0128-154	MPP CAPACITOR	0.15uF DC400V H	
D522	FMV-3FU-F1	SI DIODE			C530	QCB32HK-561Z	C CAPACITOR	560pF 500V K	
D523	MA8047/M/-X	Z DIODE			C531	QFZ0194-534	MPP CAPACITOR	0.53uF 250V J	
D526	FR105GT-T3	SI DIODE			C532	QETM2CM-227	E CAPACITOR	220uF 160V M	
D541	FR105GT-T3	SI DIODE			C535	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D542	MA8100/M/-X	Z DIODE			C541	QFVF1HJ-684Z	MF CAPACITOR	0.68uF 50V J	
D551	FR105GT-T3	SI DIODE			C542	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
D552	FR105GT-T3	SI DIODE			C545	NDC31HJ-102X	C CAPACITOR	1000pF 50V J	
D553	RGP10J-5025-T3	SI DIODE			C547	QZC0340-681	C CAPACITOR	680pF 2kV K	
D582	MA8075/M/-X	Z DIODE			C551	QCB32HK-152Z	C CAPACITOR	1500pF 500V K	
D583	MA8075/M/-X	Z DIODE			C552	QETM1EM-108	E CAPACITOR	1000uF 25V M	
D584	FR105GT-T3	SI DIODE			C553	QCB32HK-152Z	C CAPACITOR	1500pF 500V K	
D629	MA111-X	SI DIODE			C555	QCB32HK-102Z	C CAPACITOR	1000pF 500V K	
D630	MA111-X	SI DIODE			C556	QETN2EM-106Z	E CAPACITOR	10uF 250V M	
D631	MA111-X	SI DIODE			C581	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
D633	MA111-X	SI DIODE			C582	QETN1EM-476Z	E CAPACITOR	47uF 25V M	
D902	FR107GT-T3	SI DIODE			C583	QETN2AM-106Z	E CAPACITOR	10uF 100V M	
D904	FR105GT-T3	SI DIODE			C584	QETN1AM-227Z	E CAPACITOR	220uF 10V M	
D905	MA111-X	SI DIODE			C623	QETN1EM-108Z	E CAPACITOR	1000uF 25V M	
D907	MA111-X	SI DIODE			C651	QENC1HM-106Z	BP E CAPACITOR	10uF 50V M	
D909	MA8062/M/-X	Z DIODE			C652	QENC1HM-106Z	BP E CAPACITOR	10uF 50V M	
D911	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		C654	QETN1HM-107Z	E CAPACITOR	100uF 50V M	
D913	MA8330/M/-X	Z DIODE			C655	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	
D950	FR105GT-T3	SI DIODE			C656	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	
D951	RU4AM-LFT2	SI DIODE			C657	QETM1VM-228	E CAPACITOR	2200uF 35V M	
D952	FMX-G12S	SI DIODE			C660	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	
D953	FR105GT-T3	SI DIODE			C661	NCB21EK-224X	C CAPACITOR	0.22uF 25V K	
D954	RU3YX-LFC4	SI DIODE			C663	QETN1EM-108Z	E CAPACITOR	1000uF 25V M	
D955	MA8091/M/-X	Z DIODE			C664	QETN1EM-108Z	E CAPACITOR	1000uF 25V M	
D956	FR105GT-T3	SI DIODE			C666	QETN1HM-335Z	E CAPACITOR	3.3uF 50V M	
D957	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J		C668	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
D958	MA8330/M/-X	Z DIODE			C669	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
D959	MA111-X	SI DIODE			C670	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
D960	RU4AM-LFT2	SI DIODE			C701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D965	MA8024-X	Z DIODE			C907	QEZ0649-227	E CAPACITOR	220uF 400V M	
D972	EC30HA03L-X	SB DIODE			C908	QCB32HK-103	C CAPACITOR	0.01uF 500V K	
D973	MA111-X	SI DIODE			C909	QZC0340-391	C CAPACITOR	390pF 2kV K	
D981	MA111-X	SI DIODE			C910	QEHR1HM-105Z	E CAPACITOR	1uF 50V M	
C004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C911	QFLC1HJ-392Z	M CAPACITOR	3900pF 50V J	
C005	QETN1CM-108Z	E CAPACITOR	1000uF 16V M		C912	QCB31HK-103Z	C CAPACITOR	0.01uF 50V K	
C006	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C914	QZC0340-471	C CAPACITOR	470pF 2kV K	
					C915	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
					C916	QCB32HK-152Z	C CAPACITOR	1500pF 500V K	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C917	QCB31HK-471Z	C CAPACITOR	470pF 50V K	R535	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
C918	QETN1VM-106Z	E CAPACITOR	10uF 35V M	R536	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C951	QE20203-227	E CAPACITOR	220uF 160V M	R537	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C952	QE20255-228	E CAPACITOR	2200uF 16V M	R541	NRS144F-224X	MG RESISTOR	220kΩ 1/4W F
C953	QETN1CM-108Z	E CAPACITOR	1000uF 16V M	R542	NRS144F-224X	MG RESISTOR	220kΩ 1/4W F
C954	QETM1VM-228	E CAPACITOR	2200uF 35V M	R543	NRS144F-274X	MG RESISTOR	270kΩ 1/4W F
C957	QEHQ1EM-228	E CAPACITOR	2200uF 25V M	R546	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D
C959	QFVF1HJ-684Z	MF CAPACITOR	0.68uF 50V J	R547	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D
C960	QCZ0325-561	C CAPACITOR	560pF 2kV K	R548	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J
C963	QETN2CM-107Z	E CAPACITOR	100uF 160V M	R551	QRT039J-1R0	MF RESISTOR	1Ω 3W J
C964	QETN1CM-107Z	E CAPACITOR	100uF 16V M	R552	QRT039J-1R0	MF RESISTOR	1Ω 3W J
C966	QCB32HK-102Z	C CAPACITOR	1000pF 500V K	R581	QRF154K-4R7	UNF WW RESISTOR	4.7Ω 15W K
C975	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	R582	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J
C976	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R583	QRE121J-682Y	C RESISTOR	6.8kΩ 1/2W J
C977	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R584	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
C979	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R585	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C980	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R586	NRSA63D-682X	MG RESISTOR	6.8kΩ 1/16W D
C981	NCB31CK-105X	C CAPACITOR	1uF 16V K	R587	NRSA63D-242X	MG RESISTOR	2.4kΩ 1/16W D
C982	QETN1CM-108Z	E CAPACITOR	1000uF 16V M	R588	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C984	QETN1EM-477Z	E CAPACITOR	470uF 25V M	△R591	QRZ9017-4R7	FUSI RESISTOR	4.7Ω 1/4W J
C985	QETN1CM-107Z	E CAPACITOR	100uF 16V M	R629	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C990	QFVE1HJ-225	MF CAPACITOR	2.2uF 50V J	R631	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
C991	QCB31HK-471Z	C CAPACITOR	470pF 50V K	R632	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J
C992	QCB31HK-471Z	C CAPACITOR	470pF 50V K	R635	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
C993	QETN1CM-476Z	E CAPACITOR	47uF 16V M	R637	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
△C999	QCZ9079-102	C CAPACITOR	1000pF AC250V M	R638	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J
R002	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R651	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R003	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R652	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R655	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R007	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R657	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R008	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R658	QRK126J-2R2X	UNF C RESISTOR	2.2Ω 1/2W J
R009	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	R660	QRK126J-2R2X	UNF C RESISTOR	2.2Ω 1/2W J
R010	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	R661	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R011	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R662	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R012	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R663	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R013	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R664	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R014	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	R701	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R015	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R702	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R016	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R703	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R017	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	R704	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R018	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	R905	QRE121J-474Y	C RESISTOR	470kΩ 1/2W J
R019	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	R906	QRE121J-474Y	C RESISTOR	470kΩ 1/2W J
R401	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R908	QRL039J-823	OMF RESISTOR	82kΩ 3W J
R402	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R909	QRL039J-823	OMF RESISTOR	82kΩ 3W J
R403	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R910	QRE121J-150Y	C RESISTOR	15Ω 1/2W J
R404	QRX01GJ-1R0	MF RESISTOR	1Ω 1W J	R911	QRE121J-122Y	C RESISTOR	1.2kΩ 1/2W J
R405	QRL029J-221	OMF RESISTOR	220Ω 2W J	R913	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R406	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R915	QRE121J-101Y	C RESISTOR	100Ω 1/2W J
R407	QRX01GJ-R68	MF RESISTOR	0.68Ω 1W J	R916	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R408	QRX01GJ-1R0	MF RESISTOR	1Ω 1W J	R917	QRZ0237-R15	UNF WW RESISTOR	0.15Ω
R409	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	R918	QRT029J-1R0	MF RESISTOR	1Ω 2W J
R410	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R921	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R461	QRL029J-820	OMF RESISTOR	82Ω 2W J	R947	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R462	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	R948	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R463	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	R949	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R464	QRX01GJ-3R3	MF RESISTOR	3.3Ω 1W J	R950	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R465	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R952	QRL039J-223	OMF RESISTOR	22kΩ 3W J
R470	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R953	QRT039J-4R7	MF RESISTOR	4.7Ω 3W J
R471	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	R955	QRL029J-680	OMF RESISTOR	68Ω 2W J
R472	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D	R956	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R473	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	R957	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R474	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R965	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R475	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R966	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J
R476	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R967	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R477	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	R972	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R478	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R973	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R481	NRSA63J-224X	MG RESISTOR	220kΩ 1/16W J	R982	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D
R482	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R984	NRSA63D-104X	MG RESISTOR	100kΩ 1/16W D
R484	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	R985	NRSA63D-821X	MG RESISTOR	820Ω 1/16W D
R485	QRE121J-334Y	C RESISTOR	330kΩ 1/2W J	R987	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R486	QRE121J-334Y	C RESISTOR	330kΩ 1/2W J	R988	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R487	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	R989	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R488	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R990	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J
R497	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R991	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R498	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R992	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J
R499	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R994	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R501	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R995	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R502	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R997	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R503	QRE121J-152Y	C RESISTOR	1.5kΩ 1/2W J	△R999	QRZ9046-825Z	C RESISTOR	8.2MΩ 1/2W K
R504	QRL039J-222	OMF RESISTOR	2.2kΩ 3W J	L001	QQL244K-270Z	PEAKING COIL	27uH K
R505	QRL039J-182	OMF RESISTOR	1.8kΩ 3W J	L002	QQL244K-100Z	PEAKING COIL	10uH K
R506	QRE121J-5R6Y	C RESISTOR	5.6Ω 1/2W J	L003	NQL093M-220X	COIL	22uH M
R521	QRE121J-471Y	C RESISTOR	470Ω 1/2W J	L004	NQL093M-180X	COIL	18uH M
R522	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	L461	QQL2030-801	COIL	800uH 2A K
R523	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	L462	QQR1422-001	CHOKE COIL	
R524	QRC121K-152Z	COMP RESISTOR	1.5kΩ 1/2W K	L521	QQR1697-001	CHOKE COIL	
R528	NRSA63D-822X	MG RESISTOR	8.2kΩ 1/16W D	L551	QQL2026-540	COIL	54uH
R531	NRSA63D-392X	MG RESISTOR	3.9kΩ 1/16W D	L592	QQR1714-001	LINEARITY COIL	
R534	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	L942	QQL26AK-220Z	CHOKE COIL	22uH K

△Ref No.	Part No.	Part Name	Description Local
L951	QQLZ026-460	COIL	46uH
L971	QQL244K-100Z	PEAKING COIL	10uH K
L973	QQR1401-001	CHOKE COIL	
L974	QQL26AK-470Z	CHOKE COIL	47uH K
T501	QQR1111-001	LINEARITY COIL	
T521	QQR1696-001	PIN TRANSF	
△T901	QQS0369-001	SW TRANSF	
CN001	QGB1509J1-55	CONNECTOR	B-B (1-55)
CN002	QGB1505J1-15	CONNECTOR	B-B (1-15)
△CP951	ICP-N75-T	IC PROTECTOR	2.7A
△CP952	ICP-N70-T	IC PROTECTOR	2.5A
△CP953	ICP-N75-T	IC PROTECTOR	2.7A
K001	NQR0389-003X	FERRITE BEADS	
K401	QQR0621-002Z	FERRITE BEADS	
K522	QQR1114-001Z	FERRITE BEADS	
K523	QQR1114-001Z	FERRITE BEADS	
K524	QQR1114-001Z	FERRITE BEADS	
K901	QQR1113-001Z	FERRITE BEADS	
K951	QQR0621-002Z	FERRITE BEADS	
K952	QQR0621-002Z	FERRITE BEADS	
K954	QQR0621-002Z	FERRITE BEADS	
K955	QQR0621-002Z	FERRITE BEADS	
△PC901	PC123Y22FZ	PHOTO COUPLER	
TU001	QAU0452-001	TUNER	

AC P.W. BOARD ASS'Y (SMR-2001A-U2)

△Ref No.	Part No.	Part Name	Description Local
Q2943	2SC3928A/QR/-X	TRANSISTOR	
D2901	D3SBA60	BRIDGE DIODE	
D2941	MA111-X	SI DIODE	
D2942	MA111-X	SI DIODE	
D2943	MA8091/M/-X	Z DIODE	
D2944	MA111-X	SI DIODE	
△C2901	QFZ9072-474	MM CAPACITOR	0.47uF AC250V K
△C2902	QFZ9072-104	MM CAPACITOR	0.1uF AC250V K
△C2903	QFZ9072-473	MM CAPACITOR	0.047uF AC250V K
△C2904	QFZ9072-473	MM CAPACITOR	0.047uF AC250V K
△C2905	QCZ9054-472	C CAPACITOR	4700pF AC250V Z
△C2906	QCZ9054-472	C CAPACITOR	4700pF AC250V Z
△C2907	QCZ9054-472	C CAPACITOR	4700pF AC250V Z
C2941	QETN1CM-107Z	E CAPACITOR	100uF 16V M
C2942	QETN1EM-476Z	E CAPACITOR	47uF 25V M
△C2992	QCZ9079-471	C CAPACITOR	470pF AC250V K
R2901	QRE121J-331Y	C RESISTOR	330Ω 1/2W J
△R2902	QRZ9046-105Z	C RESISTOR	1MΩ 1/2W K
R2903	QRF104K-3R9	UNF WW RESISTOR	3.9Ω 10W K
R2905	QRL039J-683	OMF RESISTOR	68kΩ 3W J
R2941	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R2942	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R2943	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J
R2944	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
L2901	QQL401K-100Z	CHOKE COIL	10uH K
L2902	QQL401K-100Z	CHOKE COIL	10uH K
△L2903	QQR1200-001	CHOKE COIL	
△LF2901	QQR1731-001	LINE FILTER	
△LF2902	QQR1095-001	LINE FILTER	
△RY2942	QSK0099-001	RELAY	
TH2901	QAD0121-9R0	P THERMISTOR	9Ω

CRT SOCKET P.W. BOARD ASS'Y (SMR-3001A-U2)

△Ref No.	Part No.	Part Name	Description Local
IC3201	TDA6111Q/N4	IC	
IC3202	TDA6111Q/N4	IC	
IC3203	TDA6111Q/N4	IC	
Q3104	2SC3928A/QR/-X	TRANSISTOR	
Q3105	2SC1627A/OY/-T	SI TRANSISTOR	
Q3108	2SA2005/DE/	POW TRANSISTOR	
Q3109	2SC5511/DE/	POW TRANSISTOR	
Q3301	2SA1530A/QR/-X	TRANSISTOR	
Q3303	2SA1530A/QR/-X	TRANSISTOR	
Q3304	2SC3928A/QR/-X	TRANSISTOR	
D3103	FR105GT-T3	SI DIODE	
D3104	FR105GT-T3	SI DIODE	

△Ref No.	Part No.	Part Name	Description Local
D3201	FR105SGT-T2	SI DIODE	
D3202	FR105SGT-T2	SI DIODE	
D3203	FR105SGT-T2	SI DIODE	
D3204	FR105GT-T3	SI DIODE	
D3205	1N4003SG-T2	SI DIODE	
D3206	1N4003SG-T2	SI DIODE	
D3207	1N4003SG-T2	SI DIODE	
D3208	UDZS13B-X	Z DIODE	
D3209	UDZS13B-X	Z DIODE	
D3210	UDZS13B-X	Z DIODE	
D3302	1SS355-X	SI DIODE	
C3106	QEHR1HM-335Z	E CAPACITOR	3.3uF 50V M
C3107	QEHR1CM-107Z	E CAPACITOR	100uF 16V M
C3110	QEHR2CM-106Z	E CAPACITOR	10uF 160V M
C3111	QCB32HK-472Z	C CAPACITOR	4700pF 500V K
C3113	QEHR2CM-106Z	E CAPACITOR	10uF 160V M
C3114	QCB32HK-472Z	C CAPACITOR	4700pF 500V K
C3116	QEHR1CM-107Z	E CAPACITOR	100uF 16V M
C3117	QEHR1CM-107Z	E CAPACITOR	100uF 16V M
C3118	QEHR1AM-337Z	E CAPACITOR	330uF 10V M
C3120	NDC31HJ-561X	C CAPACITOR	560pF 50V J
C3201	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C3202	NDC31HJ-8R0X	C CAPACITOR	8pF 50V J
C3203	NDC31HJ-100X	C CAPACITOR	10pF 50V J
C3204	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3205	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3206	NCF31CZ-104X	C CAPACITOR	0.1uF 16V Z
C3207	QEHR1VM-476Z	E CAPACITOR	47uF 35V M
C3208	QEHR1VM-476Z	E CAPACITOR	47uF 35V M
C3209	QEHR1VM-476Z	E CAPACITOR	47uF 35V M
C3210	QFKC2EK-104Z	MM CAPACITOR	0.1uF 250V K
C3211	QFKC2EK-104Z	MM CAPACITOR	0.1uF 250V K
C3212	QFKC2EK-104Z	MM CAPACITOR	0.1uF 250V K
C3213	NDC31HJ-681X	C CAPACITOR	680pF 50V J
C3214	NDC31HJ-681X	C CAPACITOR	680pF 50V J
C3215	NDC31HJ-681X	C CAPACITOR	680pF 50V J
C3216	QETN1CM-227Z	E CAPACITOR	220uF 16V M
C3221	QETN2EM-106Z	E CAPACITOR	10uF 250V M
C3222	QETN2EM-475Z	E CAPACITOR	4.7uF 250V M
C3223	QEHR2EM-475Z	E CAPACITOR	4.7uF 250V M
C3224	QEHR2EM-475Z	E CAPACITOR	4.7uF 250V M
C3225	QFZ0196-682	MPP CAPACITOR	6800pF 1.5kV H
C3302	QETN1HM-105Z	E CAPACITOR	1uF 50V M
C3303	NCB31AK-224X	C CAPACITOR	0.22uF 10V K
R3103	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R3114	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R3115	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J
R3116	QRG01GJ-101	OMF RESISTOR	100Ω 1W J
R3117	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R3122	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
R3123	QRE121J-563Y	C RESISTOR	56kΩ 1/2W J
R3124	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
R3125	QRE121J-563Y	C RESISTOR	56kΩ 1/2W J
R3126	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J
R3127	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
R3128	NRSA63J-390X	MG RESISTOR	39Ω 1/16W J
R3129	QRE121J-2R7Y	C RESISTOR	2.7Ω 1/2W J
R3130	QRE121J-2R7Y	C RESISTOR	2.7Ω 1/2W J
R3131	NRSA63J-390X	MG RESISTOR	39Ω 1/16W J
R3132	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J
R3133	QRL029J-681	OMF RESISTOR	680Ω 2W J
△R3134	QRZ9021-561	FUSI RESISTOR	560Ω 1W J
R3201	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R3202	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R3203	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R3204	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J
R3205	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R3208	NDC31HJ-101X	C CAPACITOR	100pF 50V J
R3218	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R3219	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R3220	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R3223	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R3224	QRL029J-104-F	OMF RESISTOR	100kΩ 2W J
R3225	QRL029J-104-F	OMF RESISTOR	100kΩ 2W J
R3226	QRL029J-104-F	OMF RESISTOR	100kΩ 2W J
R3227	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3228	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3229	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R3230	QRC121K-561Z	COMP RESISTOR	560Ω 1/2W K
R3231	QRC121K-561Z	COMP RESISTOR	560Ω 1/2W K
R3232	QRC121K-561Z	COMP RESISTOR	560Ω 1/2W K
R3233	QRE121J-104Y	C RESISTOR	100kΩ 1/2W J
R3234	QRZ0107-152Z	C RESISTOR	1.5kΩ 1/2W K
R3235	QRZ0107-102Z	C RESISTOR	1kΩ 1/2W K
R3236	QRZ0107-105Z	C RESISTOR	1MΩ 1/2W K
R3239	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R3240	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J
R3241	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J

△Ref No.	Part No.	Part Name	Description	Local
R3242	NRSA63J-562X	MG RESISTOR	5.6kΩ	1/16W J
R3243	NRSA63J-103X	MG RESISTOR	10kΩ	1/16W J
R3244	NRSA63J-103X	MG RESISTOR	10kΩ	1/16W J
R3245	NRSA63J-103X	MG RESISTOR	10kΩ	1/16W J
R3302	NRSA63J-103X	MG RESISTOR	10kΩ	1/16W J
R3304	NRSA63J-222X	MG RESISTOR	2.2kΩ	1/16W J
R3308	NRSA63J-0R0X	MG RESISTOR	0Ω	1/16W J
R3310	NRSA63J-0R0X	MG RESISTOR	0Ω	1/16W J
R3311	NRSA63J-121X	MG RESISTOR	120Ω	1/16W J
R3312	NRSA63J-0R0X	MG RESISTOR	0Ω	1/16W J
R3313	NRSA63J-221X	MG RESISTOR	220Ω	1/16W J
L3204	QQL26AJ-102Z	PEAKING COIL		1mH J
L3205	QQL244K-5R6Z	PEAKING COIL		5.6uH K
L3206	QQL244K-5R6Z	PEAKING COIL		5.6uH K
L3207	QQL244K-5R6Z	PEAKING COIL		5.6uH K
CN300G	QJK002-073222-E	SIN CR C-B WIRE		
CN300R	QJK002-082813-E	E-SI C WIRE C-B		
K3101	QQR1114-001Z	FERRITE BEADS		
K3103	QQR1114-001Z	FERRITE BEADS		
K3104	QQR1114-001Z	FERRITE BEADS		
K3105	QQR0621-002Z	FERRITE BEADS		
K3106	QQR0621-002Z	FERRITE BEADS		
K3202	QQR1113-001Z	FERRITE BEADS		
SG3201	QAF0082-501Z	SURGE ABSORBER		500V
SG3202	QAF0082-501Z	SURGE ABSORBER		500V
SG3203	QAF0082-501Z	SURGE ABSORBER		500V
△SK3001	QNZ0536-002	CRT SOCKET		

FRONT P.W. BOARD ASS'Y (SMR-7001A-U2)

△Ref No.	Part No.	Part Name	Description	Local
C7101	NCB31HK-103X	C CAPACITOR	0.01uF	50V K
C7102	NCB31HK-103X	C CAPACITOR	0.01uF	50V K
C7103	NCB31HK-102X	C CAPACITOR	1000pF	50V K
C7104	NCB31HK-102X	C CAPACITOR	1000pF	50V K
C7131	NCB31HK-472X	C CAPACITOR	4700pF	50V K
C7132	NCB31HK-472X	C CAPACITOR	4700pF	50V K
C7321	NCB31CK-104X	C CAPACITOR	0.1uF	16V K
R7101	NRSA63J-821X	MG RESISTOR	820Ω	1/16W J
R7102	NRSA63J-152X	MG RESISTOR	1.5kΩ	1/16W J
R7111	QRE121J-101Y	C RESISTOR	100Ω	1/2W J
R7112	QRE121J-101Y	C RESISTOR	100Ω	1/2W J
R7113	NRSA63J-102X	MG RESISTOR	1kΩ	1/16W J
R7114	NRSA63J-102X	MG RESISTOR	1kΩ	1/16W J
CN700B	QJK002-031213-E	SIN CR C-B WIRE		
CN700F	WJP0083-001A-E	E-SH C WIRE C-B		
CN700H	QJK002-051410-E	SIN CR C-B WIRE		
J7111	QNS0257-001	3.5 JACK		HEADPHONE
J7131	QNN0591-001	PIN JACK		EXT-3(V/L/R)
K7111	NQR0599-004X	FERRITE BEADS		
K7112	NQR0599-004X	FERRITE BEADS		
K7113	NQR0599-004X	FERRITE BEADS		
K7131	NQR0599-004X	FERRITE BEADS		
K7132	NQR0599-004X	FERRITE BEADS		
K7133	NQR0599-004X	FERRITE BEADS		
S7001	QSW0619-003Z	PUSH SWITCH		CH+
S7002	QSW0619-003Z	PUSH SWITCH		CH-
S7003	QSW0619-003Z	PUSH SWITCH		VOLUME

POWER SW P.W. BOARD ASS'Y (SMR-8501A-U2)

△Ref No.	Part No.	Part Name	Description	Local
IC8551	LA6515	IC		
IC8851	GP1UM281QKVF	IR DETECT UNIT		
Q8801	UN2212-X	DIGI TRANSISTOR		
D8801	LH22440-T16	LED		POWER
C8551	NCF31CZ-224X	C CAPACITOR	0.22uF	16V Z
C8552	NCF31CZ-224X	C CAPACITOR	0.22uF	16V Z
C8553	QETN1EM-476Z	E CAPACITOR	47uF	25V M
C8554	NCF31CZ-224X	C CAPACITOR	0.22uF	16V Z
C8555	NCF31CZ-224X	C CAPACITOR	0.22uF	16V Z
C8851	NCB31CK-104X	C CAPACITOR	0.1uF	16V K
C8852	QETN1CM-107Z	E CAPACITOR	100uF	16V M
C8853	NCB31CK-104X	C CAPACITOR	0.1uF	16V K
R8551	NRSA63J-124X	MG RESISTOR	120kΩ	1/16W J

△Ref No.	Part No.	Part Name	Description	Local
R8552	QRK126J-100X	UNF C RESISTOR	10Ω	1/2W J
R8553	NRSA63J-683X	MG RESISTOR	68kΩ	1/16W J
R8554	NRSA63J-562X	MG RESISTOR	5.6kΩ	1/16W J
R8555	NRSA63J-154X	MG RESISTOR	150kΩ	1/16W J
R8556	NRSA63J-104X	MG RESISTOR	100kΩ	1/16W J
R8557	QRK126J-100X	UNF C RESISTOR	10Ω	1/2W J
R8558	NRSA63J-562X	MG RESISTOR	5.6kΩ	1/16W J
R8559	NRSA63J-333X	MG RESISTOR	33kΩ	1/16W J
R8560	NRSA63J-472X	MG RESISTOR	4.7kΩ	1/16W J
R8801	NRSA63J-153X	MG RESISTOR	15kΩ	1/16W J
R8802	NRSA63J-682X	MG RESISTOR	6.8kΩ	1/16W J
R8804	NRSA63J-0R0X	MG RESISTOR	0Ω	1/16W J
R8851	NRSA63J-102X	MG RESISTOR	1kΩ	1/16W J
R8852	QRE121J-470Y	C RESISTOR	47Ω	1/2W J
CN850W	WJK0200-004A-E	E-SI C WIRE C-B		
△F8901	QMF5AD2-5R0-J1	FUSE		5A AC250V
K8551	QQR0621-002Z	FERRITE BEADS		
K8552	QQR0621-002Z	FERRITE BEADS		
△S8901	QSW0824-001	PUSH SWITCH		POWER

SIGNAL P.W. BOARD ASS'Y (SMR0V001A-U2)

△Ref No.	Part No.	Part Name	Description	Local
IC101	MM1510XN-X	IC		
IC102	MM1510XN-X	IC		
IC103	UMX1N-W	PAIR TRANSISTOR		
IC301	CXA2150AQ	IC		
IC701	VCT6743GFAB2080	IC		
IC702	S-80828CNNB-G-W	IC		
IC901	PQ080DNA1Z-X	IC		
IC902	PQ090DNA1Z-X	IC		
IC903	SI-8008TM-X	IC		
Q101	RT4N430C-X	DIGI TRANSISTOR		
Q102	RT4N430C-X	DIGI TRANSISTOR		
Q103	2SA1530A/QR/-X	TRANSISTOR		
Q104	RT4N430C-X	DIGI TRANSISTOR		
Q105	RT4N430C-X	DIGI TRANSISTOR		
Q106	2SA1530A/QR/-X	TRANSISTOR		
Q107	2SC3928A/QR/-X	TRANSISTOR		
Q108	2SC3928A/QR/-X	TRANSISTOR		
Q109	2SC3928A/QR/-X	TRANSISTOR		
Q354	2SC3837K/NP/-X	TRANSISTOR		
Q355	2SC3837K/NP/-X	TRANSISTOR		
Q356	2SC3837K/NP/-X	TRANSISTOR		
Q381	2SC3928A/QR/-X	TRANSISTOR		
Q382	2SA1530A/QR/-X	TRANSISTOR		
Q391	2SC3837K/NP/-X	TRANSISTOR		
Q392	2SC3928A/QR/-X	TRANSISTOR		
Q393	2SA1530A/QR/-X	TRANSISTOR		
Q401	2SC3928A/QR/-X	TRANSISTOR		
Q402	2SC3928A/QR/-X	TRANSISTOR		
Q404	2SC3928A/QR/-X	TRANSISTOR		
Q431	2SC3928A/QR/-X	TRANSISTOR		
Q432	2SC3928A/QR/-X	TRANSISTOR		
Q504	2SC3928A/QR/-X	TRANSISTOR		
Q505	2SC3928A/QR/-X	TRANSISTOR		
Q771	2SA1022/BC/-X	TRANSISTOR		
Q772	2SC3837K/NP/-X	TRANSISTOR		
Q791	2SK3019-X	MOS FET		
Q792	2SK3019-X	MOS FET		

D101	MA8036/L/-X	Z DIODE
D102	MA8036/L/-X	Z DIODE
D103	MA8036/L/-X	Z DIODE
D105	MA8082/M/-X	Z DIODE
D106	MA8082/M/-X	Z DIODE
D107	MA8036/L/-X	Z DIODE
D108	MA8036/L/-X	Z DIODE
D109	MA8036/L/-X	Z DIODE
D111	MA8082/M/-X	Z DIODE
D112	MA8082/M/-X	Z DIODE
D115	MA111-X	SI DIODE
D116	MA8068/M/-X	Z DIODE
D117	MA8036/L/-X	Z DIODE
D118	MA8036/L/-X	Z DIODE
D119	MA8036/L/-X	Z DIODE
D120	MA8056/M/-X	Z DIODE
D121	MA8056/M/-X	Z DIODE
D381	MA8051/M/-X	Z DIODE
D401	MA111-X	SI DIODE
D701	MA111-X	SI DIODE
D703	MA8036/L/-X	Z DIODE
D704	MA8036/L/-X	Z DIODE
D705	MA8036/L/-X	Z DIODE
D706	MA8036/L/-X	Z DIODE

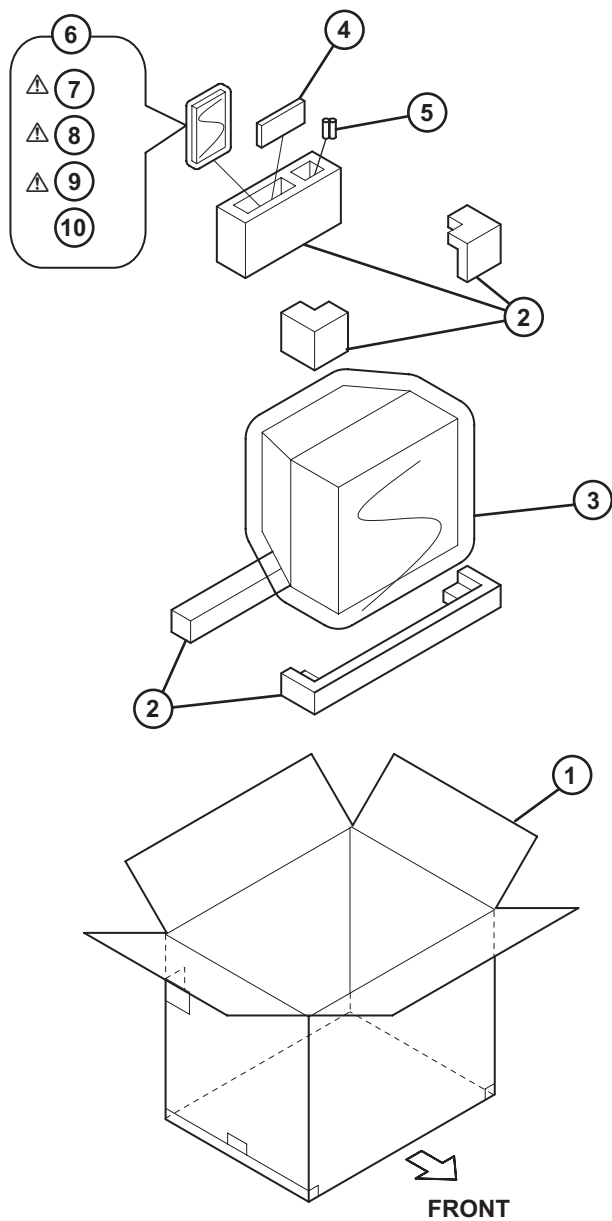
△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
D902	EC30HA03L-X	SB DIODE		C415	NCB21EK-474X	C CAPACITOR	0.47uF 25V K
D903	MA111-X	SI DIODE		C416	NCB21EK-224X	C CAPACITOR	0.22uF 25V K
C101	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C417	QFLC1HJ-563Z	M CAPACITOR	0.056uF 50V J
C102	QETN1AM-107Z	E CAPACITOR	100uF 10V M	C533	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C103	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C534	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
C104	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C105	NCB11CK-105X	C CAPACITOR	1uF 16V K	C702	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C108	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C703	QETN1HM-335Z	E CAPACITOR	3.3uF 50V M
C109	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C704	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C110	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C705	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C111	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C706	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C112	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C707	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C113	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C708	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C114	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C709	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C115	QETN1AM-107Z	E CAPACITOR	100uF 10V M	C710	NDC31HJ-220X	C CAPACITOR	22pF 50V J
C116	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C711	NDC31HJ-220X	C CAPACITOR	22pF 50V J
C117	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C712	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C118	NCB11CK-105X	C CAPACITOR	1uF 16V K	C713	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C119	NCB31HK-152X	C CAPACITOR	1500pF 50V K	C714	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C120	NCB31HK-152X	C CAPACITOR	1500pF 50V K	C715	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C121	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C716	NCB31AK-334X	C CAPACITOR	0.33uF 10V K
C122	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C717	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C123	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C718	NCB31CK-104X	C CAPACITOR	0.1uF 16V K
C124	NCB31HK-472X	C CAPACITOR	4700pF 50V K	C719	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C125	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C720	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C126	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C721	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C127	QETN1CM-476Z	E CAPACITOR	47uF 16V M	C722	NDC31HJ-151X	C CAPACITOR	150pF 50V J
C128	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C725	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C129	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C726	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C132	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C727	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C133	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C728	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C134	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C730	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C135	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	C731	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C136	QETN1HM-106Z	E CAPACITOR	10uF 50V M	C732	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C137	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C733	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C138	NDC31HJ-560X	C CAPACITOR	56pF 50V J	C734	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C139	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C735	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C140	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	C736	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C141	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C737	NCB10JK-106X	C CAPACITOR	10uF 6.3V K
C142	NCB10JK-106X	C CAPACITOR	10uF 6.3V K	C738	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C143	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C740	QETN1HM-106Z	E CAPACITOR	10uF 50V M
C144	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C741	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C145	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C742	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
C146	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C743	NDC31HJ-102X	C CAPACITOR	1000pF 50V J
C147	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C744	QETN1HM-106Z	E CAPACITOR	10uF 50V M
C148	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C901	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C149	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C902	QETN1HM-106Z	E CAPACITOR	10uF 50V M
C150	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C905	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C151	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C906	QETN1CM-106Z	E CAPACITOR	10uF 16V M
C152	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C907	QETN1CM-106Z	E CAPACITOR	10uF 16V M
C153	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C908	NCB31HK-104X	C CAPACITOR	0.1uF 50V K
C154	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C909	QETN1CM-227Z	E CAPACITOR	220uF 16V M
C301	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C910	NCB31CK-105X	C CAPACITOR	1uF 16V K
C302	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	C911	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M
C303	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R101	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C304	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R102	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C305	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R103	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C306	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R104	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C307	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	R105	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C308	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	R106	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C309	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	R107	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C310	QETN0JM-228Z	E CAPACITOR	2200uF 6.3V M	R108	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C311	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R109	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C312	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R110	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C313	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R111	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C314	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R112	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C315	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R113	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C316	QETN1AM-107Z	E CAPACITOR	100uF 10V M	R114	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C317	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R115	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C318	QETN1HM-106Z	E CAPACITOR	10uF 50V M	R116	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C319	NCB31CK-683X	C CAPACITOR	0.068uF 16V K	R117	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C320	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R118	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C321	QETN1HM-105Z	E CAPACITOR	1uF 50V M	R119	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C322	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R120	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C323	QETN1AM-107Z	E CAPACITOR	100uF 10V M	R121	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C382	QETN1EM-476Z	E CAPACITOR	47uF 25V M	R122	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J
C391	NCB31CK-224X	C CAPACITOR	0.22uF 16V K	R123	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C392	NDC31HJ-561X	C CAPACITOR	560pF 50V J	R124	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
C393	NCB11CK-105X	C CAPACITOR	1uF 16V K	R125	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C401	QETN1HM-107Z	E CAPACITOR	100uF 50V M	R126	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J
C402	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R127	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C403	NCB21AK-225X	C CAPACITOR	2.2uF 10V K	R128	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
C404	NCB31HK-561X	C CAPACITOR	560pF 50V K	R129	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C405	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	R130	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J
C406	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R131	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
C407	QFP31HJ-473	PP CAPACITOR	0.047uF 50V J	R133	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C408	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R134	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
C410	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R135	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
C412	NCB31HK-104X	C CAPACITOR	0.1uF 50V K	R136	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R137	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R712	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J
R138	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R713	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J
R139	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R714	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R141	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	R715	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J
R142	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R716	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R143	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	R717	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R146	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R718	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R147	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R719	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R148	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R721	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R149	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	R722	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R150	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R723	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R151	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R724	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R152	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R725	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R153	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	R726	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J
R154	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	R728	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R155	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	R729	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R304	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R311	NRSA63J-335X	MG RESISTOR	3.3MΩ 1/16W J	R731	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R317	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	R732	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R319	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R733	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R320	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R736	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R321	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R738	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R322	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R739	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R323	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R741	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R356	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R742	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R359	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R743	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R363	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R744	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J
R364	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R745	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R365	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R750	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R366	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R751	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J
R367	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R754	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R368	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R755	NRZ0040-103X	NET RESISTOR	10kΩ 1/16W J x4
R373	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	R756	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J
R381	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R764	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R383	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	R765	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J
R384	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R766	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R386	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	R767	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J
R387	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	R768	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J
R391	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	R769	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J
R392	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	R771	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J
R393	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	R772	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J
R394	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	R773	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R395	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	R774	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R396	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R775	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J
R397	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	R776	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J
R401	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R777	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R403	NRSA63D-103X	MG RESISTOR	10kΩ 1/16W D	R778	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R404	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	R781	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J
R405	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	R782	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R406	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R783	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R407	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	R784	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J
R408	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	R791	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R409	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	R792	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J
R411	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R903	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D
R412	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R904	NRSA63D-821X	MG RESISTOR	820Ω 1/16W D
R413	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	R905	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D
R414	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J				
R415	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	L701	NQL79GM-100X	COIL	10uH M
R416	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	L702	NQL79GM-100X	COIL	10uH M
R417	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	L703	NQL79GM-100X	COIL	10uH M
R419	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	L704	NQL79GM-100X	COIL	10uH M
R420	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	L705	NQL79GM-100X	COIL	10uH M
R421	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	L706	NQL79GM-4R7X	COIL	4.7uH M
R422	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	L707	NQL79GM-100X	COIL	10uH M
R424	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	L708	NQL79GM-100X	COIL	10uH M
R425	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	L709	NQL79GM-100X	COIL	10uH M
R426	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	L710	NQL79GM-100X	COIL	10uH M
R427	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	L711	NQL79GM-100X	COIL	10uH M
R428	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	L712	NQL79GM-100X	COIL	10uH M
R431	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	L713	NQL79GM-100X	COIL	10uH M
R432	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	L714	NQL79GM-100X	COIL	10uH M
R433	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	L902	NQL79GM-100X	COIL	10uH M
R434	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	L903	NQLC8CM-470X	COIL	47uH M
R436	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	L904	NQLC8CM-470X	COIL	47uH M
R518	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J				
R519	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	CN001	QGB1509K1-55T	CONNECTOR	B-B (1-55)
R520	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	CN002	QGB1505K1-15	CONNECTOR	B-B (1-15)
R521	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	J101	QNZ0465-001	21P CONNECTOR	EXT-1/EXT-2
R522	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	K101	NQR0389-003X	FERRITE BEADS	
R539	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	K102	NQR0389-003X	FERRITE BEADS	
R540	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	K103	NQR0389-003X	FERRITE BEADS	
R703	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	K104	NQR0389-003X	FERRITE BEADS	
R704	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	K105	NQR0599-004X	FERRITE BEADS	
R705	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J
R706	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K701	NQR0389-003X	FERRITE BEADS	
R707	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	K901	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J
R708	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	X401	QAX0900-001	C RESONATOR	2.696MHz
R709	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	X701	NAX0661-001X	CRYSTAL	20.2MHz
R710	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J				
R711	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J				

REMOTE CONTROL UNIT PARTS LIST (RM-C1502-2C)

⚠ Ref.No.	Part No.	Part Name	Description	Local
	2AK061080	BATTERY COVER		

PACKING



PACKING PARTS LIST

⚠ Ref.No.	Part No.	Part Name	Description	Local
1	GA10002-078A-U	PACKING CASE	5 pcs in 1set	
2	LC12636-001A-U	CUSHION ASSY		
3	GA10044-001A-U	POLY BAG		
4	RM-C1502-2C	REMOTE CONTROL UNIT		
5	-----	BATTERY	R6P/AA(x2)	
6	GA30007-001A-U	DOCUMENT BAGS		
⚠ 7	LCT2000-001A-U	INST BOOK	English/German/French/Dutch/Spanish/Italian/Portuguese	
⚠ 8	LCT2001-001A-U	INST BOOK	Norwegian/Danish/Finn/Swedish	
⚠ 9	LCT2002-001A-U	INST BOOK	Bulgarian/Hungarian/Romanian/Czech/Polish/Russian	
10	-----	WARRANTY CARD	BT-54027-1E	